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ABSTRACT

To assess the changing lifestyles, values, and preferences of American youth, measures of drug use, interrelationships among such measures, and their relationships to other variables were investigated in a nationwide survey of 1978 high school seniors. Students reported their use of cigarettes, alcohol, marijuana and 10 other categories of drugs during their lifetime, the past year, and the past 30 days. The data revealed that reported use during the past 30 days was systematically higher than predictions based on reported use during the past year, suggesting that self-reports for use during the past year substantially underestimated the frequency of use. Composite measures of drug use were subsequently developed to combine information about lifetime, annual, and 30-day use. The results indicate that the composite measures are well-suited for correlational analyses with a variety of other dimensions and can generally be used in place of the set of three separate measures (lifetime, annual, monthly) for each drug. (Author/KMF)

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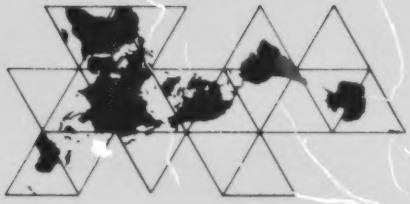

monitoring **the future**

occasional paper series

paper 5

DEVELOPING COMPOSITE MEASURES OF DRUG USE: COMPARISONS AMONG LIFETIME, ANNUAL AND MONTHLY REPORTS FOR THIRTEEN CLASSES OF DRUGS

Jerald G. Bachman
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Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth

As its title suggests, this study is intended to assess the changing lifestyles, values, and preferences of American youth on a continuing basis. Each year since 1975 about 17,000 seniors have participated in the annual survey, which is conducted in some 130 high schools nationwide. In addition, subsamples of seniors from previously participating classes receive follow-up questionnaires by mail each year.

This Occasional Paper Series is intended to disseminate a variety of products from the study, including pre-publication (and somewhat more detailed) versions of journal articles, other substantive articles, and methodological papers.

A full listing of occasional papers and other study reports is available from Monitoring the Future, Institute for Social Research, The University of Michigan, P.O. Box 1248, Ann Arbor, MI 48106.

DEVELOPING COMPOSITE MEASURES OF DRUG USE: COMPARISONS AMONG LIFETIME, ANNUAL AND MONTHLY REPORTS FOR THIRTEEN CLASSES OF DRUGS

Monitoring the Future Occasional Paper 5

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ABSTRACT

This analysis of the Monitoring the Future survey of the high school senior class of 1978 focuses on self-reports of use of cigarettes, alcohol, marijuana, and ten other categories of drugs during the lifetime, the past year, and the past thirty days. Emphasis is given to the development of composite measures of frequency of use for each of these categories of drugs.

Of special importance is the finding that reported use during the past thirty days is systematically higher (by a factor of two to four times) than would be predicted based on reported use during the past year. The most likely interpretation of this discrepancy is that the self-reports for use during the past year substantially underestimate the frequency of use, at least for those who use a drug more than a handful of times during the year.

Composite measures of drug use were developed which combine information about lifetime, annual, and thirty-day use. Associations among the composite measures can be characterized as linear, step/linear, or bi-linear. Two relatively simple rescalings suffice to convert the latter two into essentially linear relationships. The composite measures (appropriately rescaled) provide more information—and thus higher correlations—than any one of their ingredients.

Based on these several analyses, it is concluded that the composite measures are well-suited for correlational analyses with a variety of other dimensions, and can generally be used in place of the set of the three separate measures (lifetime, annual, monthly) for each drug in the Monitoring the Future study.

1980 UPDATE

The mismatch between monthly and annual self-reported drug use, noted in the abstract above and discussed at some length on pages 5-9 of the present paper, was the subject of a later more extensive analysis employing data from the senior classes of 1976 through 1979. Although the findings do not conflict with those reported herein, they do represent an extension and elaboration. The report of that analysis is available as Occasional Paper 9 in this series.

Introduction

This report is concerned with measures of drug use, interrelationships among such measures, and their relationships with certain other dimensions. Our purpose is not to provide a detailed report about levels of drug use, since we have done that elsewhere (Johnston, Bachman & O'Malley, 1977, 1979). Rather, our purpose here is to focus on patterns of relationship, with particular emphasis on the scaling properties of our measures of drug use.

The analyses are based on data obtained from the Monitoring the Future project, a series of annual nationwide surveys of high school seniors conducted by the Institute for Social Research under a grant from the National Institute on Drug Abuse. The study design has been described extensively elsewhere (Bachman & Johnston, 1978; Johnston et al., 1977, 1979), and a brief description of the samples and questionnaire administration procedures is included as an appendix to this report. It is sufficient to note here that the project has surveyed high school seniors each year since 1975, involves large samples (N = 16,000 to more than 18,000), is nationally representative, and employs "base year" questionnaires administered in schools plus follow-up questionnaires mailed to selected respondents for up to six years after high school. The data reported here are based on the survey of high school seniors in the class of 1978.

The Monitoring the Future project employs a fairly extensive set of questionnaire items dealing with the history of use of various drugs. In particular, every respondent at every data collection (senior year plus follow-ups) is asked about use during lifetime, past twelve months, and past thirty days for each of twelve different categories of substances. Two questions about cigarette use are also included. For a number of analytic purposes it is useful to be able to have a single variable that captures most of the individual variation in use of a particular drug, rather than three separate variables. Taking marijuana as an example, one can best distinguish among the frequent users by considering their reports of use during the past thirty days; but since a majority of seniors (in 1978) used no marijuana during that period, a large segment of the sample will be treated in an undifferentiated manner unless use over a longer time interval is taken into account. Extending the interval to the past year provides additional information, and extending it still further to take account of lifetime use provides still more information. Therefore, we set out to build composite measures which take account of all three questions dealing with all three time intervals (lifetime, last year, last month).

This paper summarizes the development of composite measures of the use of marijuana, alcohol, and ten other drugs, as well as a composite measure of cigarette smoking patterns, past and present. We begin by examining the relationships between lifetime, annual, and monthly prevalence measures for both marijuana and alcohol.

Relationships Between Lifetime, Annual, and Monthly Prevalence: Marijuana and Alcohol

Table 1 displays the cross-tabulation between number of occasions of marijuana use in lifetime and number of occasions of use during past year. Several observations can be made based on the table:

TABLE 1

Marijuana Usage--Lifetime Vs. Last 12 Months

		"B7B: *Number of Times Marijuana & Hashish Used in Last 12 Months*"						
		0	1-2	3-5	6-9	10-19	20-39	40+
"B7A: *Number of Times Marijuana & Hashish Used in Lifetime*"	0	41.1 (7386)	--	--	--	--	--	--
	1-2	5.0 (907)	3.9 (693)	--	--	--	--	--
	3-5	1.7 (307)	2.4 (433)	2.0 (359)	--	--	--	--
	6-9	.6 (113)	1.1 (189)	1.7 (303)	1.3 (242)	--	--	--
	10-19	.5 (88)	.7 (123)	1.5 (269)	2.2 (388)	1.6 (280)	--	--
	20-39	.4 (66)	.3 (63)	.7 (122)	1.2 (213)	2.4 (429)	1.2 (216)	--
	40+	.6 (105)	.5 (86)	.6 (108)	.7 (128)	2.1 (385)	4.6 (826)	17.5 (3137

N = 17963 (Item Reference Numbers: B7A = 00860; B7B = 00870)

NOTE: Cell entries are grand percentages based on total weighted N.
Weighted cell Ns are in parentheses.

1. Obviously, there is a very strong association between the two dimensions. In fact, the corresponding product-moment correlation is .91. (It also appears in the table that there are no cases of logical inconsistency--i.e., there are no instances in which total use during the past year exceeds total use during the lifetime. This tidy state of affairs occurs because the few inconsistencies which did appear in the raw data were removed in the data cleaning process. Inconsistencies in other drugs were similarly "cleaned.")

2. The largest single category consists of the 41 percent who have never used marijuana.

3. The next largest category, at the opposite corner of the table, consists of those who have used marijuana 40 or more times during the past year (and thus also during their lifetime).

4. A number of respondents reported no marijuana use during the past year but some use during their lifetime. These individuals, shown in the left-hand column of the table (except for the top cell), total about 9 percent of the total sample.

5. For the remaining respondents, there is a very strong correspondence between the reported amount of lifetime use and the amount of use reported for the past 12 months. A rough rule of thumb is that use reported for the past year tends to be a bit less than half that reported for the lifetime.* Stated differently, our respondents' reports would seem to indicate that nearly half of their marijuana use occurred during the past year. Whether this is accurate or represents some selective forgetting for longer intervals is a matter to be considered later.

Table 2 shows the relationship between marijuana use during the past year and use during the past month. This table gives rise to several observations which are similar to those based on Table 1:

1. Monthly and annual rates of marijuana use are highly correlated (product-moment r = .89).

2. About half of the seniors reported no marijuana use during the past year (and thus none during the past month).

3. Another 13 percent reported some use during the past year but none during the past month.

4. The remaining respondents reported some use during the past month; the number of uses average roughly one fourth as many times as reported for the whole year. For example, among those who reported using marijuana 20-39 times during the past 12 months, the median response for use during the past 30 days was 6-9 times. Looked at the other way, among those using who reported marijuana 3-5

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*Because the top category (40 or more) is open-ended, one cannot compute actual means. In order to compare amounts of use between two different time intervals, it is necessary to make some assumptions about the actual number of occasions of use.

TABLE 2

Marijuana Usage--Last 12 Months Vs. Last 30 Days

		"B7C: *Number of Times Marijuana & Hashish Used in Last 30 Days*"						
		0	1-2	3-5	6-9	10-19	20-39	40+
"B7B: *Number of Times Marijuana & Hashish Used in Last 12 Months*"	0	50.0 (8969)	--	--	--	--	--	--
	1-2	6.9 (1231)	2.0 (354)	--	--	--	--	--
	3-5	3.2 (568)	2.8 (497)	.5 (96)	--	--	--	--
	6-9	1.5 (273)	2.2 (390)	1.5 (270)	.2 (39)	--	--	--
	10-19	1.0 (171)	1.5 (267)	2.1 (372)	1.3 (229)	.3 (50)	--	--
	20-39	.4 (77)	.4 (78)	1.1 (201)	1.5 (271)	2.0 (355)	.4 (64)	--
	40+	.2 (43)	.3 (51)	.7 (126)	1.5 (273)	4.4 (787)	5.0 (905)	5.3 (946)

N = 17953 (Item Reference Numbers: B7B = 00870; B7C = 00880)

NOTE: Cell entries are grand percentages based on total weighted N. Weighted cell Ns are in parentheses.

times in the last month, the median reported annual use was 10-19 times. Thus the rate of use reported for the most recent month seems not at all "representative" of the use rate reported for the last year (if a "representative" month were considered to consist of about one twelfth of the number of uses during the total year). Before trying to sort out this lack of consistency between annual and monthly data on times of marijuana use, we will consider whether a similar pattern appears for another commonly used drug—alcohol.

Tables 3 and 4 present data for alcohol use which parallel the data for marijuana use shown in Tables 1 and 2. The alcohol data, like the data for marijuana, show high correlations between lifetime and annual use rates ($r = .88$), and between annual and monthly use rates ($r = .83$). We noted earlier that reported annual marijuana use tends to be just under one half the amount of use reported for the lifetime. The pattern for alcohol is similar: for each level of lifetime use shown in Table 3, the median level of annual use is between one third and one half as large. Perhaps more important is the comparison between annual and monthly data; we find for alcohol, as we did for marijuana, that use during the past month tends to be about one fourth the use reported for the whole year (see Table 4).

If we are to take these self-reports of amounts of marijuana and alcohol use entirely at face value, we must conclude that our respondents used these drugs much more frequently during the month before the survey than during most of the rest of the past year, and that they used still less during preceding years. Let us consider how plausible this may be. Certainly it seems reasonable (and consistent with other data) to conclude that there is more drug use during the senior year of high shool than during the junior year or the sophomore year or any earlier year. Nearly half of those who reported ever using marijuana, for example, indicated that their first use did not occur until they were in tenth grade (Johnston et al., 1979). But is it equally reasonable to conclude that the monthly rate of alcohol and marijuana use at the time of our survey was three times higher than the average monthly rate for the rest of the year? That seems more difficult to accept, although at least two explanations might be offered. First, it could be argued that there is a marked acceleration in drug use during the senior year of high school, with each month involving more use than the last. While there is some degree of acceleration going on during this period, we consider it implausible that such acceleration would be large enough to produce the pattern we have observed. Second, it could be argued that the period late in the senior year of high school is simply atypical—students are suffering from what has been termed "senioritis," and they are much more likely than usual to be involved in parties and other activities that include the use of marijuana and alcohol.

This second argument, that our data on monthly use are artificially inflated because we surveyed our respondents during the spring of their senior year, is worth some serious exploration. It should be pointed out that our data collections in most schools occur in April, and this means that questions about the past thirty days refer to a period during March and/or April. Although the end of high school is clearly in sight, the students have not yet reached the last few weeks (when "senioritis" is alleged to be most severe). Nevertheless, the possibility remains that alcohol and marijuana use are already atypical during the period referenced in our question about the past thirty days. Thus it is useful to consider what other data might be brought to bear on this issue.

One additional kind of data involves an examination of a number of other drug categories to see whether a similar pattern of reporting appears. When we examined our findings for use of amphetamines, barbiturates, tranquilizers, and cocaine, we found relationships between monthly and yearly usage reports that closely match our

TABLE 3

Alcohol Usage--Lifetime vs. Last 12 Months

		"B4B: *Number of Times Drink Alcohol in Last 12 Months*"						
		0	1-2	3-5	6-9	10-19	20-39	40+
"B4A: *Number of Times Drink Alcohol in Lifetime*"	0	7.0 (1219)	--	--	--	--	--	--
	1-2	3.1 (5466)	3.5 (605)	--	--	--	--	--
	3-5	1.1 (1946)	4.5 (773)	1.7 (293)	--	--	--	--
	6-9	.5 (835)	2.5 (436)	3.8 (651)	1.3 (228)	--	--	--
	10-19	.3 (55)	1.3 (220)	3.7 (644)	5.0 (860)	2.0 (344)	--	--
	20-39	.1 (13)	.3 (49)	1.4 (237)	3.2 (561)	6.6 (1148)	1.8 (305)	--
	40+	.2 (37)	.2 (36)	.7 (127)	2.0 (353)	7.7 (1338)	13.0 (2257)	21.6 (3743)

N = 17357 (Item Reference Numbers: B4A = 00810; B4B = 00820)

NOTE: Cell entries are grand percentages based on total weighted N. Weighted cell Ns are in parentheses.

TABLE 4

Alcohol Usage--Last 12 Months Vs. Last 30 Days

		"B4C: *Number of Times Drink Alcohol in Last 30 Days*"						
		0	1-2	3-5	6-9	10-19	20-39	40+
"B4B: *Number of Times Drink Alcohol in Last 12 Months*"	0	12.4 (2152)	--	--	--	--	--	--
	1-2	9.1 (1575)	3.1 (542)	--	--	--	--	--
	3-5	4.0 (688)	6.6 (1153)	.7 (125)	--	--	--	--
	6-9	1.6 (2828)	5.9 (1033)	3.5 (603)	.5 (80)	--	--	--
	10-19	.8 (131)	4.2 (734)	7.2 (1252)	3.6 (632)	.5 (84)	--	--
	20-39	.2 (32)	1.3 (232)	4.7 (823)	5.0 (860)	3.3 (568)	.2 (42)	--
	40+	.1 (24)	.5 (81)	2.7 (469)	5.3 (923	7.6 (1321)	3.2 (558)	2.2 (374)

N = 17375 (Item Reference Numbers: B4B = 00820; B4C = 00830)

NOTE: Cell entries are grand percentages based on total weighted N.
Weighted cell Ns are in parentheses.

findings for marijuana and alcohol. In each case the average amount of use reported for the past month ranges from one fifth to one third the average amount reported for the past year.* Thus, as a rough but workable generalization, we can say that our respondents report levels of drug use during the past thirty days which are two to four times larger than we would estimate if we were extrapolating from their reported usage during the past twelve months.

Given that the mismatch between annual and monthly usage rates appears for amphetamines, barbiturates, tranquilizers, and cocaine, as well as for alcohol and marijuana, does this help us to explain or interpret the mismatch? We think it may. It is one thing to assert that use of alcohol and marijuana, and perhaps also cocaine, may be subject to a sharp upswing late in the senior year; but it seems less compelling to assert that such an upswing occurs to an equal degree for use of amphetamines, barbiturates, and tranquilizers. The generality and consistency of this pattern suggests that we should explore alternative explanations which are not unique to the senior year of high school.

One further bit of data leads in the same direction. We conducted a preliminary analysis of longitudinal data from the class of 1975 followed up in 1976 and 1977, looking to see how respondents one and two years beyond high school reported their monthly and annual use of marijuana and alcohol. (In these analyses we restricted the sample to those who had participated in both follow-ups, thus avoiding problems of bias due to panel attrition.) We found some overall increases in rates of usage, of course. More important, we found nearly the same pattern of mismatch between annual and monthly rates as we have been discussing above: reported use during the past thirty days was two to three times greater than would be estimated based on the reports for the past year—and this held true for data collected in 1975 (senior year), 1976, and 1977. In other words, the pattern is by no means limited to the senior year of high school.

The fact that the mismatch in reports of annual and monthly drug use rates applies to a number of different drugs, and to a number of years beyond high school, leads us to favor an explanation in much broader terms than the "senioritis" interpretation discussed earlier. We think the most likely explanation is systematic respondent error--people simply fail to remember things accurately, and longer time intervals involve greater amounts of inaccuracy. Cannell and his colleagues (Cannell, Fisher & Bakker, 1965; Cannell & Fowler, 1963; Oksenberg & Cannell, 1977), as well as a number of other investigators, have found that people do indeed forget visits to doctors and other medically relevant information when responding to surveys; and accuracy clearly diminishes when longer time intervals are involved. Elliott (personal communication) has found that reports of delinquent behavior over different intervals lead to different overall estimates of frequency; for example, the actual number of delinquent acts reported during a four-month interval is nearly identical to the number reported during an eight-month interval—a pattern that

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*These averages are estimated means using response distributions of the total sample along our seven-point scale of amount of drug use. The estimates are not at all precise, but even a rough estimate is sufficient to indicate that usage rates reported for the past month are much higher than one would project based on usage rates for the past year.

would suggest that the "daily rate" of delinquent behavior was almost twice as high during the shorter interval. These findings in other areas of survey research, when coupled with our own findings, lead us to suspect that many of our respondents substantially underestimate their drug use during the past year. We suspect that estimates are far more accurate for the shorter and more recent interval of the past month; nevertheless, it seems likely that even for a thirty-day interval there are difficulties in recall, and some respondents may underestimate while others may actually overestimate. The overestimates may result from a "telescoping" of time--remembering events as occuring more recently than they actually did (Sudman and Bradburn, 1974).

What implications does all this have for our interpretations of the drug use data from the Monitoring the Future project? Obviously, it means that we may be underestimating the total amount of lifetime drug use as well as drug use during the past year. But we suspect that other aspects of our data are less subject to error. In particular, we think it is not very likely that a respondent will forget using a particular class of drug at least once, even though the number of times (beyond one or two or three) may be less clearly recalled. If this assumption is correct, then our data may be subject to rather little recall error when we are reporting in terms of percentages of respondents who have used a drug at all during the past year or during their lifetime. It may be only when we move above the "once or twice" category that we begin to experience the systematic underestimation of amount of use.

Perhaps a further implication is particularly relevant to our present effort to develop and refine our drug measurement scales: we suspect that the drug use reports are fairly accurate in ordering people by amount of use, even if there is some (widely shared) tendency toward underreporting use over long intervals. Thus if one respondent reports having used marijuana on six to nine occasions during the past year, while a second respondent reports between twenty and thirty-nine occasions, we feel fairly confident that the second respondent has used more marijuana than the first, even though either or both may be somewhat underestimating the total number of occasions. (It should be noted, of course, that tendencies toward underreporting and possibly overreporting may vary systematically from one individual to another, and this complicates matters. Nonetheless, the data in Tables 2 and 4, and the other analyses summarized above, indicate that a majority of all respondents reporting any appreciable amount of drug use do at least some amount of underreporting. Thus the problem does not seem to be limited to a small or somehow special segment of our sample.)

Composite Measures of Prevalence of Drug Use

For each drug category covered by the Monitoring the Future survey, respondents are asked to report amount of use during lifetime, past year, and past thirty days. (The one exception to this pattern involves cigarette smoking, to be discussed later.) As we noted above, the responses to the lifetime, annual, and monthly use measures are highly correlated in the case of alcohol and the case of marijuana. The same is true for the other categories of drugs.

For many analysis purposes it will be useful to be able to use a single variable that captures most of the individual variation in the use of a particular drug, rather than having to rely on the separate lifetime, annual, and monthly measures. Not

only will it be less cumbersome, but also a single composite measure may prove to be a stronger correlate than any of the three intervals taken alone. Let us take marijuana as an example of how such a composite might work.* One can best distinguish among frequent marijuana users by considering their reports of use during the past thirty days; but since a majority of seniors (in 1978) used no marijuana at all during that period, it is useful to take account of a longer time interval. Extending the interval to the past year provides additional information, since about half of the seniors reported some use during that interval. Extending further to take account of lifetime use adds another nine percent of seniors with some marijuana experience, and leaves a residual category of 41 percent of seniors who reported no use of marijuana at any time. Thus, if we want to make as many meaningful distinctions as possible among respondents in terms of their experience with marijuana, we need a composite measure that takes account of all three intervals: lifetime, last year, last thirty days.

Objectives in Developing a Composite Scale. In developing a composite scale of the use of a given drug, we kept a number of objectives in mind:

1. We wanted a scale format that would spread out the individuals in our sample to a considerable degree, although for most drugs the majority fall into the category of zero exposure and that places clear limits on our ability to spread out the sample.

2. We also preferred that the composite scale format retain as much information as possible from the contributing items. In other words, we did not want to "throw away data." It will always be possible to combine some categories together in order to simplify presentation of findings; but for many purposes, including correlational analyses, we prefer to retain as much detailed information as possible.

3. A closely related objective is that one can easily translate or interpret the composite scale in terms of the items from which it is derived. To put it another way, there are advantages in having each scale point refer to a specific amount of drug use (even though such amounts may be underestimates for some respondents, as noted earlier).

4. Another objective arising from a desire for simplicity and ease of communication is that a single composite scale format be workable for all the different categories of drug use measured in the Monitoring the Future questionnaires. (The one important exception is cigarette use, discussed below.) Since a standard seven-point scale is used to measure lifetime, annual, and monthly rates of use for each of the drugs included in the questionnaire forms, it is quite feasible to develop a composite format that can be applied to all the drug categories. However, it becomes important to take account of the considerable differences in rates of use between the more common drugs such as alcohol and marijuana, compared with the less frequently used drugs such as heroin.

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*Our questions asked about use of marijuana or hashish, but as a convenience in this discussion we will simply use the term marijuana.

5. A further objective guided our development of a composite scale: we preferred that the scale be interpretable primarily in terms of annual rate of drug use. Thus, as described in detail below, we developed a format which relies primarily on reported use during the past twelve months, but takes account of use during the past thirty days in order to make further distinctions among the most frequent users. There are several reasons for placing a heavier emphasis on annual than monthly usage data, but it will be easier to discuss these after we have have presented the composite scale format we have chosen to use.

6. Our final objective was to develop a composite scale format such that the association with other measures (including use of other drugs) would be as close to linear as possible. (Linear relationships permit much more simple and parsimonious analyses and explanations than non-linear ones.) In the original design of the Monitoring the Future drug use measures we were guided by the fairly common assumption that people can make more accurate recollections about the exact number of relatively rare events than about the exact number of more frequent events; for example, it seems much easier to distinguish between two and four uses of marijuana during the past year than to distinguish between twenty-two and twenty-four uses. The scale that we chose is roughly logarithmic: 0 occasions, 1-2, 3-5, 6-9, 10-19, 20-39, 40 or more. Except for the fact that one and two occasions are lumped together, each new point on the scale represents roughly twice as much use as the preceding point. Our intention in developing the composite scale was to retain that roughly logarithmic pattern, and also to do some testing to see whether such a scale would, in fact, produce essentially linear relationships with other dimensions. (We report the results of that testing later in this paper.)

Composite Scale Format. After a considerable amount of exploration and trial-and-error, the following eleven-category scale was developed to describe the use of any category of drug measured in the Monitoring the Future questionnaire forms. The scale makes use of self-reports of occasions of use during lifetime, last twelve months, and last thirty days:

1. Never used drug
2. Used at least once, but not during last year
3. Used 1-2 times during last year
4. Used 3-5 times during last year
5. Used 6-9 times during last year
6. Used 10-19 times during last year
7. Used 20-39 times during last year
8. Used 40 or more times during last year, but fewer than 10 times during last month
9. Used 40 or more times during last year, and 10-19 times during last month
10. Used 40 or more times during last year, and 20-39 times during last month
11. Used 40 or more times during last month

The above scale is appropriately described as an "augmented annual rate of use." Categories 1 and 2 simply distinguish those who have never used a drug from those who have used, but not in the past year. For many analysis purposes it will prove useful to collapse these two categories (scaling them both with a value of 2) so that our scale (in that case a scale of 2-11) will be strictly limited to events during the past twelve months. Categories 3 through 7 are based entirely on use reported during the past twelve months, i.e., they take no account of variations in use reported during the past thirty days. The reported use during the past thirty days is employed only to make distinctions among those who report using a drug 40 or more times during the past year. The assumption is that the annual usage rate is higher among those who report very high use in the past month (e.g., 20-39 times, or 40 or more times) compared with those who report fairly high use during the past month (e.g., 10-19 times, or fewer than 10 times). In sum, except for the distinction between categories 1 and 2 (a distinction which we sometimes remove), the composite scale can be viewed as indicating, on a roughly logarithmic basis, rates of prevalence during the last year ranging from no use at all to daily use (or, at least, recent daily use).

Annual Versus Monthly Emphasis. Earlier in this paper we noted that monthly drug usage rates are consistently higher than we would expect based on a "prorating" of annual usage rates, and we suggested that a probable explanation for much of this phenomenon is systematic respondent error—that people fail to remember things accurately, and that the failure is greater when longer time intervals are involved. It follows from this that the monthly reports should be more valid than the annual reports in terms of actual amount of use, and our own view is that they are. Nevertheless, there are several overriding reasons for placing a primary emphasis on annual rather than monthly usage data in building our composite measures of drug use prevalence:

1. A one-year interval is long enough to be at least fairly sensitive to rare events. Although use of alcohol or marijuana is certainly not rare among high school seniors, use of heroin is. And for all of the other drug categories included in our survey (except, of course, cigarettes), fewer than one in four seniors report any use during their lifetime. Thus, if we wish to have a single composite scale format that is useable across the full range of drugs we are studying, we need to emphasize annual rather than monthly use.

2. When annual and monthly use data are both present (i.e., when a respondent reports some use during the past thirty days as well as during the past twelve months), there are still advantages in relying heavily on the annual data because a one-year interval is more likely to smooth out short-term fluctuations. In other words, if we are primarily interested in measuring relatively stable patterns of drug use (and we are), then we should be more interested in use over a whole year than in use during the particular thirty days which preceded the survey.

3. Finally, because our interests lie primarily in the description and interpretation of relatively stable patterns and trends in drug use, the Monitoring the Future project has an annual cycle of data collection for base-year surveys of graduating seniors and also for follow-up surveys during the years following high school. Thus a composite measure of drug use which is interpretable primarily in terms of rate of use during the past year fits best with the overall research design.

Having reviewed these several reasons for preferring an emphasis on annual rates of use, we should now acknowledge that it would make relatively little difference from a measurement standpoint if we were to give greater emphasis to the monthly data. Thus, for example, a composite scale which relied first on monthly usage reports, and took account of annual use only for those with no reported use during the past thirty days, would correlate very highly with the scale we have chosen to use. (As a matter of fact, one of our earlier attempts at a composite scale did something close to this. The resulting alcohol and marijuana use scales showed patterns of correlations with other variables which were virtually identical—generally a tiny bit lower—compared with the final version of the composite scale.)

Applying the Composite Scale to Twelve Categories of Drugs. Table 5 presents percentage distributions for the total sample, and for males and females separately, along the composite scales for marijuana use and alcohol use. The reader who wishes to see exactly how these distributions are derived from the ingredients is invited to compare the total sample columns with the data in Tables 1 and 2 (for marijuana) and Tables 3 and 4 (for alcohol). There is little need to say more about the distributions in Table 5, since we have discussed levels of drug use, including male-female differences, at some length elsewhere (Johnston et al., 1979). The one point that does seem worth making is that the composite scale succeeds in spreading out the sample in terms of both alcohol use and marijuana use. In the case of alcohol, the distribution is almost "normal" in shape. In the case of marijuana, the distribution involves over forty percent in the "never used" category, with the rest spread fairly evenly across the scale.

How does the composite scale work when applied to other drugs? The results are presented in Table 6. For each of the ten drug categories presented in the table, the large majority of respondents fall into the "never used" category, and the rest fall mostly into the lower categories of use. Indeed, the top three categories, which reflect higher levels of monthly use, are scarcely needed for most drugs. Nevertheless, it is clear that even in the case of these infrequently used drugs, the composite scale succeeds in making some differentiation among respondents.

A Composite Measure for Cigarette Use. Our measures of cigarette use depart from the format used for all other drugs; accordingly, the composite scale described above is not applicable. The first question dealing with cigarettes asks whether the respondent has ever smoked cigarettes, with response categories including never, once or twice, occasionally, regularly in the past, regularly now. The second question asks about the number of cigarettes smoked in the last thirty days. Table 7 shows the responses to these two questions, and the way they are interrelated.

After a considerable amount of trial-and-error, including an exploration of many combinations of these two questions and the ways such combinations relate to alcohol and marijuana use, we found that the fairly simple eight-category variable shown in Table 8 would suffice rather well. The top four categories are based on use during the past thirty days; the highest category consists of the small percentage of seniors smoking one and one half packs a day or more (the two-pack-a-day or more group was too small to keep separate), the next category consists of pack-a-day smokers, then those smoking about half a pack per day, then those smoking one to five cigarettes a day. The bottom four categories are limited to those who smoked less than one cigarette a day during the past month (most smoked not at all), and distinctions here are based on past smoking history: never, once or twice,

TABLE 5

Augmented Annual Rate of Use--Alcohol & Marijuana:
Percentage Distributions

		Marijuana 1-11			Alcohol 1-11		
		Total	Male	Female	Total	Male	Female
1	Never Used	41.1	35.9	46.4	7.0	5.6	8.2
2	Not Used in Last Year	8.8	8.3	9.5	5.4	4.4	6.2
3	Used 1-2 Times in Last Year	8.8	9.1	8.6	12.2	9.6	14.8
4	Used 3-5 Times in Last Year	6.5	6.8	6.1	11.2	9.0	13.4
5	Used 6-9 Times in Last Year	5.4	5.4	5.5	11.5	10.3	12.7
6	Used 10-19 Times in Last Year	6.1	5.9	6.3	16.3	16.6	16.2
7	Used 20-39 Times in Last Year	5.8	5.9	5.7	14.8	15.0	14.5
8	Used 40+ Times in Last Year, and < 10 Times in Last Month	2.7	3.3	2.2	8.6	11.3	6.0
9	Used 40+ Times in Last Year, and 10-19 Times in Last Month	4.4	5.7	3.1	7.6	10.2	5.1
10	Used 40+ Times in Last Year, and 20-39 Times in Last Month	5.0	6.4	3.7	3.2	4.5	2.0
11	Used 40+ Times in Last Month	5.3	7.3	3.0	2.2	3.4	0.9
	Weighted N =	17952	8394	8932	17354	8116	8617

TABLE 6

Illicit Drug Use Composites--Percentage Distributions

Category*	LSD			Other Psychedelics			Cocaine			Amphetamines			Quaaludes		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	90.4	88.6	92.6	88.5	86.5	90.9	87.3	84.5	90.2	77.4	78.0	77.0	92.2	91.0	93.5
2	3.4	3.7	2.9	4.2	4.7	3.6	3.7	4.1	3.3	5.6	5.1	6.0	2.9	3.1	2.7
3	3.7	4.5	2.9	3.9	4.6	3.1	5.1	6.3	3.7	6.5	6.3	6.5	2.5	3.0	2.0
4	1.2	1.6	0.8	1.7	2.1	1.2	1.7	2.2	1.3	3.4	3.7	3.1	1.0	1.3	0.8
5	0.7	0.9	0.4	0.8	0.9	0.6	0.9	1.2	0.6	2.3	2.5	2.1	0.6	0.8	0.4
6	0.4	0.6	0.2	0.6	0.6	0.4	0.7	1.0	0.4	2.2	2.2	2.2	0.4	0.4	0.3
7	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.3	0.3	1.3	1.2	1.5	0.2	0.2	0.1
8	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.2	0.1
9	0.0	0.0	[illegible]	0.0	0.1	[illegible]	0.1	0.1	0.1	0.4	0.3	0.4	0.0	0.0	0.0
10	0.0	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.3	0.2	0.4	[illegible]	0.1	0.0
11	0.0	0.0	--	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.2	0.0	0.0	0.0
Weighted N =	18330	8601	9092	18254	8561	9066	18205	8573	9053	18113	8529	9038	18148	8559	9059

	Barbiturates			Tranquilizers			Heroin			Other Narcotics			Inhalants		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	86.5	85.9	87.2	83.2	83.9	82.6	98.4	98.0	98.8	90.2	88.9	91.5	88.3	85.5	90.8
2	5.4	5.7	5.2	7.0	6.5	7.4	0.8	0.9	0.6	3.8	4.3	3.4	7.6	8.9	6.4
3	3.8	3.9	3.7	5.3	5.1	5.5	0.5	0.6	0.4	3.2	3.4	2.9	2.3	3.1	1.6
4	1.8	1.8	1.7	2.1	2.0	2.1	0.1	0.1	0.1	1.2	1.5	1.0	0.8	1.1	0.4
5	1.1	1.3	0.8	1.0	1.0	1.0	0.1	0.1	0.0	0.7	0.8	0.5	0.4	0.5	0.4
6	0.8	0.8	0.8	0.8	0.8	0.8	0.1	0.1	0.1	0.4	0.6	0.3	0.3	0.3	0.2
7	0.4	0.4	0.3	0.4	0.3	0.4	0.0	0.0	--	0.2	0.2	0.2	0.1	0.2	0.0
8	0.1	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	--	0.0	0.1	0.0	0.0	0.1	0.0
10	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	--	0.0	0.1	--	0.0	0.0	0.0
11	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
Weighted N =	18098	8556	9027	18076	8566	9015	18177	8604	9096	18010	8540	9043	14645**	6962**	7347**

*See Table 5 for category descriptions.

**Item in Forms 2-5 only.

TABLE 7

Cigarette Usage--Lifetime Vs. Last 30 Days

		"B2: *Number of Cigarettes Smoked in Last 30 Days*"						
		Not at All	< 1/Day	1-5/Day	= 1/2 Pack/Day	= 1 Pack/Day	= 1 1/2 Pack/Day	2+ Packs/ Day
"B1: *Ever Smoked Cigarettes?*"	Never	24.8 (4571)	--	--	--	--	--	--
	Once or Twice	25.5 (4687)	1.4 (265)	--	--	--	--	--
	Occa-sionally	7.4 (1355)	6.0 (1105)	2.4 (449)	.3 (61)	.0 (9)	.0 (1)	.0 (1)
	Regularly in Past	5.6 (1031)	1.4 (260)	1.2 (221)	.6 (117)	.2 (34)	.1 (10)	.0 (3)
	Regularly Now	--	0.3 (53)	5.0 (922)	8.0 (1479)	7.5 (1376)	1.7 (309)	.3 (49)

N = 18366 (Item Reference Numbers: B1 = 00760; B2 = 00780)

NOTE: Cell entries are grand percentages based on total weighted N.
Weighted cell Ns are in parentheses.

TABLE 8

Cigarette Use Composite--Percentage Distribution

	Category	Total	Male	Female
1	Never Smoked	24.9	25.7	24.5
2	Smoked Once or Twice	27.0	29.2	25.0
3	Smoked Occasionally	13.7	12.6	14.9
4	Regularly in the Past	7.0	6.6	7.5
5	Current Smoker: 1-5 a Day	8.7	6.9	10.1
6	Current Smoker: 1/2 Pack a Day	9.0	8.1	9.7
7	Current Smoker: 1 Pack a Day	7.7	8.7	6.5
8	Current Smoker: 1 1/2 Pack or More a Day	2.0	2.2	1.8
	Weighted N =	18	8587	9069

occasionally, and regularly in the past. (The handful of respondents who characterized themselves as smoking "regularly now" but averaged less than one cigarette per day were classified as "occasional" smokers—category #3—in the composite measure.)

An examination of Table 7 indicates that slightly more than half of those in category #3 ("occasional smokers") on the composite measure had not smoked at all during the past thirty days, whereas the large majority of those in category #4 ("regular past smokers") had not smoked during the past thirty days. Thus, in terms of recent smoking, it would appear that we have categories #3 and #4 out of order. On the other hand, when we explored associations with a number of other relevant variables, including use of alcohol and marijuana, we found that those in category #4 averaged higher than those in category #3. Thus, the ordering shown in Table 8 was selected because it produces a more linear association with other relevant variables; and heightening linear relationships is one of our objectives in the development of these composite measures. On the other hand, it is worth bearing in mind that the cigarette use composite remains a somewhat more complex dimension than our other composite measures. For some analysis purposes this means that we will want to examine individual categories on this variable rather than relying simply on summary measures of association (such as product-moment correlations).

A Composite Measure of Illicit Drug Use. One other composite measure of drug use should be described in this report, even though it was developed much earlier and for somewhat different purposes.* This is a measure which classifies each respondent according to overall illicit substance use. The five categories of this measure are defined as follows:

1. None. Respondents who indicated no use of marijuana and no use of any of the following illicit drugs: LSD, other psychedelics, cocaine, amphetamines, tranquilizers, methaquaalone, barbiturates, heroin, or other narcotics.

2. Marijuana Only. Respondents who indicated that they had used marijuana (or hashish) but had not used any of the other illicit drugs listed above.

3. Few Pills.** Respondents who indicated having used one or more of the above listed drugs (other than marijuana) but who had not used any one class of them on three or more occasions and who had not used heroin at all.

4. More Pills.** Respondents who indicated having used one or more of the above listed drugs (other than marijuana) on three or more occasions but who had never used heroin.

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*This measure was developed for use in a series of volumes with descriptive data from the Monitoring the Future project (Johnston & Bachman, 1980; Bachman, Johnston & O'Malley, 1980a, 1980b; Johnston, Bachman & O'Malley, 1980). The description included here is adapted from that provided in the data volumes.

**The term "pills" is used as a convenient shorthand for illicit drugs other than marijuana and heroin.

5. Any Heroin. Respondents who indicated any use of heroin.

The five drug use categories listed above are clearly scaled according to seriousness of involvement. The index has Guttman-like properties—that is, anyone classified at a given level is also very likely to have exhibited all drug-using behaviors associated with the lower levels in the index.

The most extreme category in the index is defined in terms of heroin use. We chose to represent heroin users in a separate category because even occasional heroin use represents such an extreme point on the continuum of drug involvement that we felt we would be losing potentially important information if we combined them with the next highest category of use (the "more pills" category). But having placed heroin use in a separate category, we must stress that the category is to be viewed as the top level on a continuum rather than an accurate representation of heroin users. Focusing on this top category alone would involve reliance on a very small number of cases (and, consequently, a relatively high degree of unreliability). More important, we do not consider that top category to be a realistic representation of heroin users, since such individuals (particularly continuing users) are quite likely to drop out of high school before completing the senior year (Johnston, 1973), and also since even the occasional heroin user is less likely than average to attend classes regularly and thus less likely to participate in a survey such as ours.

In sum, the use of a separate classification for heroin users among high school seniors permits greater clarity in analyzing other levels of drug use and provides data which may be suggestive about the larger population of young heroin users. But the data are clearly limited and should be interpreted with these cautions in mind.

The composite measure described above was developed initially, and is used in our annual data volumes, as an index of lifetime involvement in illicit drug use. But for some purposes it may be useful to employ a comparable measure based on drug use during the previous year. The distinction, obviously, is that for one version only the reports of drug use during the lifetime are used in assigning respondents to the five categories, and for the other version only the reported use during the past twelve months is used.

Table 9 presents frequency distributions for the total sample, and for males and females separately, along both the lifetime and the twelve-month versions of the illicit drug use index. Although both versions "spread out" the respondents to a considerable degree, it should be noted that the largest category by far consists of those with no illicit drug use. It is also worth reiterating that the proportions reporting any heroin use are extremely small within our sample of high school seniors.

Correlational Analyses of the Composite Measures

In an earlier section of this paper we listed six objectives in developing a composite scale for each class of drug studied in the Monitoring the Future project. The eleven-category scale developed for twelve drugs (alcohol, marijuana, LSD, etc.) seems, on the basis of evidence presented thus far, to meet most of our objectives—it spreads out respondents insofar as possible, it provides categories that are readily interpretable and appear to retain most of the information from the contributing items, it is workable for a variety of different drugs, and it is interpretable primarily in terms of annual rate of drug use.

TABLE 9

Illicit Drug Indices--Percentage Distributions

Code	Lifetime Illicit Drug Use			Illicit Drug Use Last 12 Months		
	Total	Male	Female	Total	Male	Female
1. None	36.0	32.3	39.9	46.4	41.5	51.4
2. Marijuana Only	28.5	32.1	25.1	27.5	31.4	23.7
3. Few Pills*	12.6	11.8	13.4	10.5	10.5	10.4
4. More Pills*	21.2	21.9	20.5	14.8	15.4	13.9
5. Any Heroin	1.7	2.0	1.2	0.9	1.1	0.6
Weighted N =	18,309	8578	9086	18,167	8510	9022

*The term "pills" is used as a convenient shorthand for illicit drugs other than marijuana and heroin. See page 18 for details.

Two objectives require further analyses, however. One objective is that the composite measures of drug use show relationships with other measures (including the use of other drugs) which are as close to linear as possible. The other objective is that we not "lose information." Thus, for example, we would prefer that any composite measure show at least as strong relationships with other variables as would any of the ingredients used in creating the composite. In order to test the extent to which our composites meet each of these objectives, we conducted a series of correlational analyses using one-way analyses of variance and product-moment correlations.

The Quest for Linearity. We set out to develop composite measures which would be as nearly linear as possible in their relationships with other variables. The primary advantage of linear relationships is that they are parsimonious—they can be described with a single correlation coefficient that indicates both strength and pattern of association. This degree of simplicity is advantageous not only for theoretical purposes but also for more practical purposes of ease and economy in data analysis. Thus we considered it an important part of this effort in scaling that we establish fairly carefully the extent to which the composite measures of drug use show essentially straight-line relationships with other measures.

In the final section of this paper we explore the relationships among the drug measures, and between the drug measures and a small sampling of other measures. Although our primary purpose was the investigation of linearity and non-linearity in patterns of association, an important by-product is a fairly detailed description of the ways in which various types of drug use are related to each other. Our analysis began with a series of one-way analyses of variance in which the shapes of relationships were explored. After that, we moved to the use of product-moment correlations in which the composite measures were rescaled in several ways in order to discover which versions most closely approximate a linear relationship with the other variables.

One-Way Analyses of Variance. An extensive series of one-way analyses of variance was carried out in which the composite measure for each of the thirteen drug classes was used as the classification or "predictor" variable, and the criterion or "dependent" variables consisted of all the other drug use composites, as well as six other measures (described below). Let us illustrate by describing the set of analyses involving alcohol use as the classification variable. For each of the eleven categories of alcohol use, mean scores were computed for each other drug use composite. Thus, for example, we were able to examine the mean marijuana use score for those who had never used alcohol (category 1), those who had used alcohol but not in the past year (category 2), those who had used alcohol only once or twice during the past year (category 3), and so on up to those who had used alcohol on forty or more occasions during the past thirty days (category 11). Similarly, we were able to examine mean cigarette use scores, mean amphetamine use scores, and so on, for each category of alcohol use. Each of these mean scores was computed by treating the criterion or "dependent" variable in the analysis as an interval scale, i.e., the interval between categories 1 and 2 was treated as equivalent to the interval between categories 2 and 3, and so on. Whether that was the optimal scaling of each criterion variable could not be determined with precision, particularly at the point when these analyses were carried out; nevertheless, we considered it to be an acceptable approximation.

In addition to the drug composites, our criterion variables in these one-way analyses of variance included six non-drug measures. These measures were selected

based on an analysis of key dimensions of background, recent experiences, and lifestyle orientations (Bachman, O'Malley & Johnston, 1980). The six measures chosen showed the strongest associations when treated as "predictors" of drug use; additionally, these patterns of association were essentially linear, thus making it appropriate to treat each of the six measures as if they were interval scales (i.e., compute means when they are used as criterion variables in one-way analyses of variance). The measures, listed roughly in descending order of their strength of correlation with drug use measures, are as follows:

Truancy (skipping classes or whole days of school)

Frequency of evenings out for fun and recreation

Religious commitment (importance, plus frequency of attendance)

Average high school grades

Income per week (from all sources)

Political views (continuum: conservative/liberal/radical)

The examination of thirteen drug composite measures, each "predicting" to twelve other drug composites plus the six other dimensions listed above, generated a total of 13 x 18 or 234 one-way analyses of variance. In addition to examining the resulting mean scores, we plotted a considerable number of these analyses graphically so that the patterns could be explored more carefully. It would be impractical to report the findings from these extensive analyses in any detail. Fortunately, there is also no need to do so, since nearly every relationship fits one of three distinct patterns, which we have labeled linear, step/linear, and bi-linear. Table 10 summarizes the various combinations of "predictors" and criteria that fit these patterns, and it is suggested that the table be used as a guide to the discussion which follows.

The simplest pattern is the essentially linear relationship illustrated in Figure 1. This pattern appears for virtually all relationships among illicit drugs other than marijuana. Additionally, we found linear patterns when the measure of alcohol use is used to "predict" cigarette use, marijuana use, and the six non-drug dimensions of background, recent experiences, and lifestyle orientation.

A second pattern emerges when each of the illicit drugs (including marijuana) is used to "predict" the six non-drug dimensions, cigarette use, alcohol use, and (except when it is the predictor) marijuana use. This pattern, which we term step/linear, is illustrated fairly dramatically in Figures 2 and 3. In each case it can be seen that "the first step is a big one." To put it less colloquially, the distinction between never using a drug (category 1) and having used it sometime but not in the past year (category 2) is far more important, in terms of the various criterion or "dependent" variables, than any of the other distinctions between adjacent categories. As Figure 2 shows, there is a sharp distinction in grades, religious commitment, and other characteristics, between those who never used amphetamines and those who used them sometime but not in the last year. Increasing amounts of use (category 3 and higher) are associated with further differences, but the shifts are not as sharp as the shift from category 1 to category 2. Figure 3 shows a similar pattern when levels of cigarette use, alcohol use, and marijuana use are plotted for the different categories on the composite scale of

TABLE 10

Patterns of Relationships Among Drug and Non-Drug Measures:
Summary of Findings From One-Way Analyses of Variance

VARIABLES TREATED AS "PREDICTORS"	"DEPENDENT" (OR "CRITERION") VARIABLES				
	Cigarette Use	Alcohol Use	Marijuana Use	Ten Other Illicit Drugs	Non-Drug Measures (bkgd, exper, lifstyl)
Cigarette Use	--	Linear[a] (1)	Linear[a] (1)	Linear[a] (10)	Linear[a] (6)
Alcohol Use	Linear (1)	--	Linear (1)	Bi-linear (10)	Linear (6)
Marijuana Use	Step/linear (1)	Step/linear (1)	--	Bi-linear (10)	Step/linear (6)
Ten Other Illicit Drugs	Step/linear (10)	Step/linear (10)	Step/linear (10)	Linear (90)[b]	Step/linear (60)

NOTES: The three patterns of relationships (Linear, Step/linear, and Bi-linear) are described and discussed in the text.

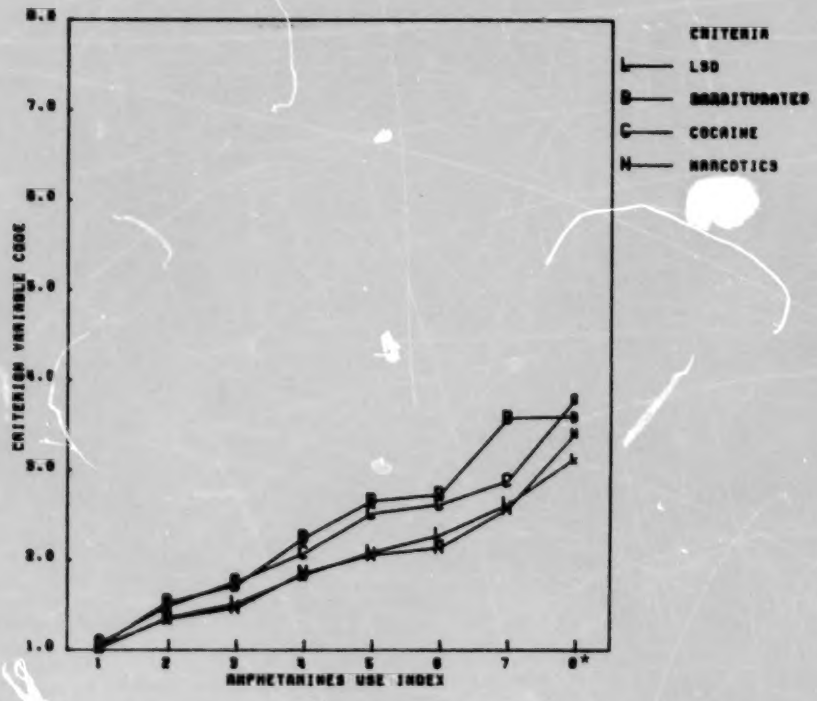
The parenthetical entries in each cell indicate the number of different relationships summarized in that cell.

[a]The "predictions" from cigarette use depart very slightly from complete linearity, specifically between categories 4 and 5 of the eight-category measure of cigarette use (see discussion in text).

[b]There are a total of 90 relationships in this cell because each of the ten "other illicit drugs" is treated as a predictor with the remaining nine used as criteria (10 x 9).

FIGURE 1

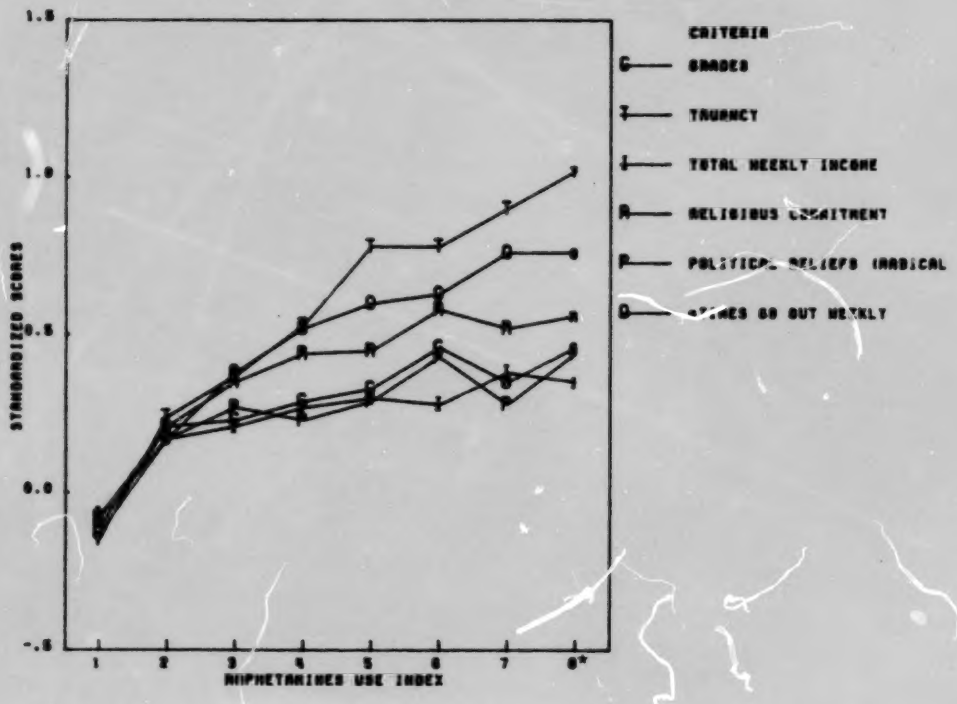
AMPHETAMINES PREDICTING TO FOUR OTHER DRUGS



* The highest 3 categories were excluded due to limited numbers of cases.

FIGURE 2

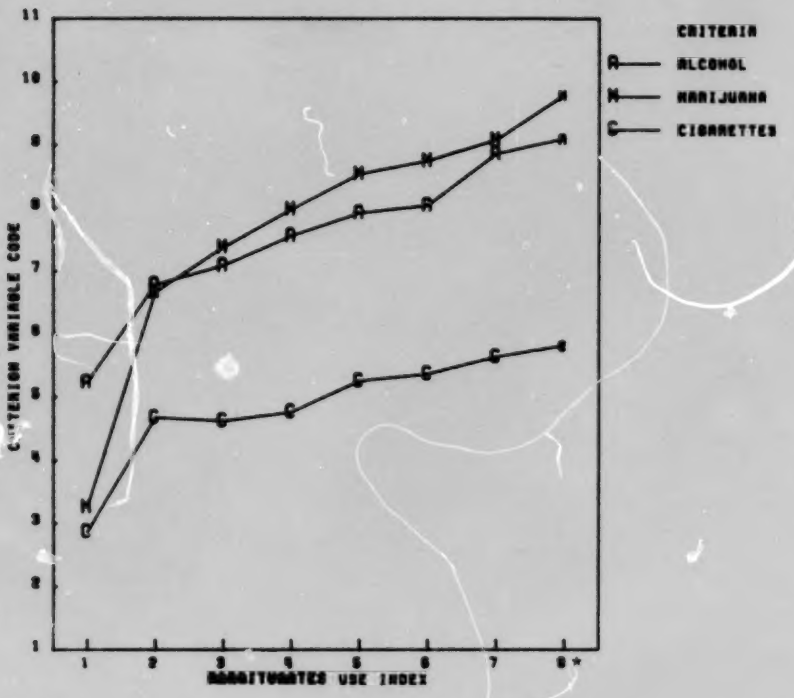
AMPHETAMINES PREDICTING TO OTHER BEHAVIORS AND ATTITUDES



* The highest 3 categories were excluded due to limited numbers of cases.

FIGURE 3

BARBITURATES PREDICTING TO CIGARETTES, ALCOHOL, AND MARIJUANA



* The highest 3 categories were excluded due to limited numbers of cases.

barbiturate use. Use of cigarettes, alcohol, and marijuana is distinctly different for the large majority of respondents with no barbiturate use, contrasted with the barbiturate users. The amount of barbiturate use also correlates with cigarette, alcohol, and marijuana use, but the relationship is less dramatic.

Perhaps the most important observation that can be made concerning the step/linear pattern described above is that it always involves a large proportion of respondents in the "never used" category (category 1). In the case of marijuana that proportion is about forty percent; in the case of all other drugs it is a large majority (three quarters or more). It appears that distinctions in terms of amount of use of a particular illicit drug are important, but the really fundamental distinction lies between users and non-users. The implication for optimal scaling of the drug use composites is that the interval between categories 1 and 2 ought to be somewhat larger than the interval between the rest of the categories. Just how much larger that interval should be, and whether the same interval can be employed across a variety of predictors and criteria, are matters to be explored in the next stage of our analysis, using product-moment correlations with a variety of different rescaling options.

The third pattern of relationship to emerge from our one-way analyses of variance is labeled bi-linear, and is illustrated in Figure 4. In Figure 4 we see that the relationship between alcohol and use of illicit drugs other than marijuana is distinctly different for the lower and higher levels of alcohol use. Specifically, it appears that for the first six categories of alcohol use (category six corresponds to drinking 10 to 19 times during the past year) the corresponding increase in mean use of illicit drugs is moderate; but above that point the relationship "takes off" and each new increment in level of alcohol use is associated with a sharper increase in use of other drugs. A very similar pattern emerges when use of other illicit drugs is plotted for each level of marijuana use.

We can summarize this bi-linear pattern as indicating that the more frequent levels of alcohol and/or marijuana use are the really important ones in predicting use of the other (so-called "hard") illicit drugs. The implication for scaling in this case is that if a linear relationship is desired, the intervals above category 6 in our composite measure of alcohol use and of marijuana use need to be larger than the lower intervals.

One other set of relationships requires only brief mention. We found that the eight-category composite measure of cigarette use showed very nearly linear relationships when "predicting" use of other drugs and also the non-drug measures. A single but rather consistent departure from linearity is illustrated in Figure 5. Each higher category on the cigarette use scale is associated with higher mean use of the other drugs, except that category 5 (those who currently smoke one to five cigarettes per day) averages a bit lower for most drugs than category 4 (those who smoked regularly in the past). We noted earlier that the cigarette use composite, with its special treatment of those who indicated regular use in the past, is more complex than our other composites; and Figure 5 serves to illustrate that point. If one were to seek a scaling of the eight cigarette use categories which optimizes linear relationships with the use of other drugs, one would either reverse or combine the fourth and fifth categories. (Incidentally, an examination of the data for the six non-drug variables suggests that it would be better to combine the two categories rather than reverse them.) The problem with either such rescaling is that the resulting ordering of categories is messy from a conceptual standpoint, in contrast

FIGURE 4

ALCOHOL PREDICTING TO FIVE OTHER DRUGS

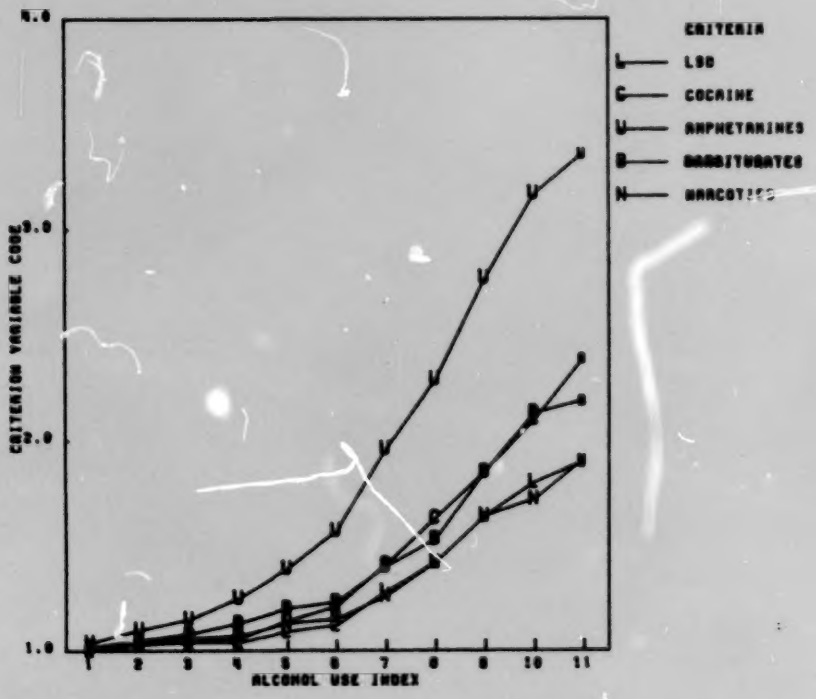
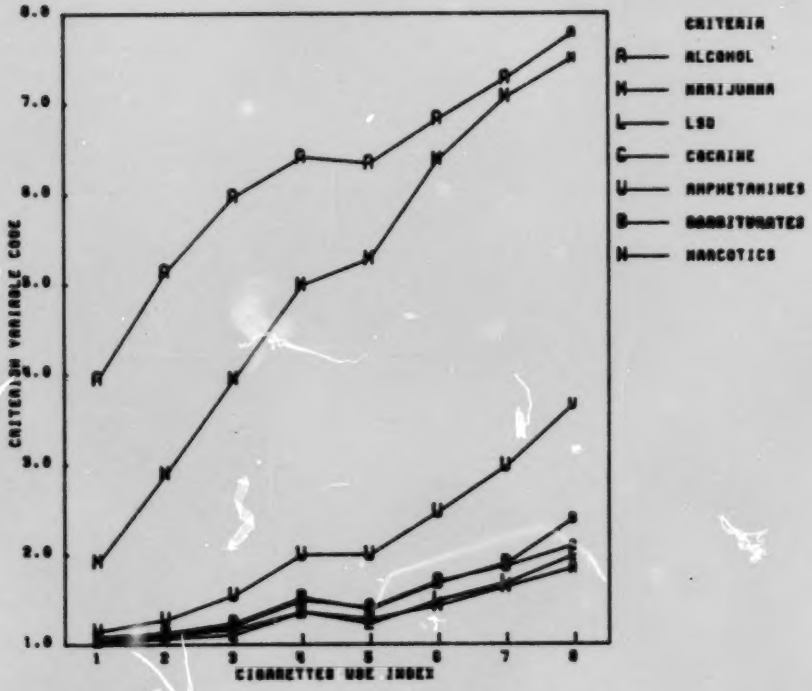


FIGURE 3

CIGARETTES PREDICTING TO SEVEN DRUGS



to the present ordering that arrays the top four categories according to current use and the bottom four categories primarily according to history of use (see descriptions in Table 8).

Examination of the one-way analyses of variance, summarized and illustrated above, served to convince us that the eleven-category composites (or eight-category in the case of cigarettes), when applied to a variety of different drugs, do not always result in strictly linear patterns of relationship. Moreover, it became clear that the optimal scaling of a drug use variable for one purpose is not necessarily best for another purpose. But the fact that a limited number of patterns were identified meant that by rescaling each of our composite measures in just a few ways we could carry out the next stage in our analysis using a more efficient statistical procedure—the product-moment correlation.

Product-Moment Correlations. The three primary patterns of relationship observed in the one-way analyses of variance described above each have implications for the ways in which variables should be scaled in order to optimize the size of product-moment correlations. The linear pattern is the simplest to deal with, for it indicates no need for a change in the scaling.

The second pattern we identified—the step/linear pattern—showed a large first step between those who never used a drug and those who had; and we concluded that in order to make such relationships more nearly linear the interval between the first and second categories should be scaled somewhat larger than the other intervals. However, the earlier analyses did not clearly indicate whether a single rescaling would do a reasonable job of capturing all the particular instances of this general pattern. Thus we found it useful to conduct an exploratory product-moment correlational analysis using a range of different rescalings: these included setting the first interval (i.e., the interval between categories 1 and 2) equal to two, three, four, and five times the size of the other intervals (e.g., between categories 2 and 3, or 3 and 4). If one were to continue to increase the size of the first interval until it were very large compared with the others, the result would be virtually identical to a simple dichotomy distinguishing between those with no use of a given drug and those with some use (with virtually no differentiation in terms of how much use). Therefore, in order to examine the upper limit of such rescaling, we included a dichotomy (no use versus any use during lifetime) among the variables in our exploratory correlational analysis.

The third pattern of relationship identified in our one-way analyses of variance—the bi-linear pattern—suggested a particular rescaling of the marijuana use and alcohol use composites in order to optimize their linear relationships with the composite measures of the other illicit drugs. That rescaling involves larger intervals at the upper end of the scale, with the eleven categories being assigned scale values as follows: 1, 2, 3, 4, 5, 6, 9, 12, 15, 18, 21.

Finally, the analysis of cigarette use, illustrated in Figure 5, indicated that an optimal scaling of the eight-category cigarette use composite might involve the combining of the fourth and fifth categories such that the eight categories would be rescaled as follows: 1, 2, 3, 4, 4, 5, 6, 7.

The several rescalings described above, as well as the original eleven-category composites (scaled 1, 2, 3 . . . 11), were all included in a product-moment correlational analysis, along with the six dimensions of background, recent experiences, and lifestyle orientations described in the preceding section. In fact,

there were really two correlational analyses conducted. The first was considered preliminary, and was focused primarily on the search for an optimal first interval in the eleven-category composites. (For reasons of economy, this preliminary analysis was conducted using a random twenty percent of the total sample, approximately 3,600 cases.) The second correlational analysis resulted in the matrix reproduced as Appendix B of this report; it contains most of the dimensions included in the preliminary analysis plus the original questionnaire responses (measures of lifetime, annual, and thirty day drug use) which were used as ingredients in forming the composites. A great deal of information is contained in the matrix, but the most important findings for our present purposes can be summarized fairly briefly:

1. Perhaps the most basic observation is that the several ways of recoding drug composites are generally associated with very small shifts in the sizes of the correlations. Most of the recodings of the first interval in the eleven-category composites led to shifts of .02 or less in the correlation coefficients. This indicates that in many respects product-moment correlations on data of this sort will be "tolerant" of some departures from strict linearity—so long as the relationship remains basically monotonic, of course. This degree of "tolerance" has at least two kinds of implications for our analyses. On the one hand, it means we can make extensive use of product-moment correlations, taking advantage of their efficiency and parsimony. On the other hand, it means also that we run some risks of overlooking departures from linearity that may prove to be theoretically important. Figures 1 through 5 illustrate a number of departures from linearity that are substantively interesting, even though most of them would contribute very little "additional variance explained" above and beyond the linear relationship captured by the product-moment correlation.

2. A second observation based on these correlational analyses is that there is no single rescaling of the drug measures that works best in all instances. There are some variations from drug to drug, and there are also variations among the non-drug measures. As an example of the latter, it is interesting to note that the measure of religious commitment shows higher correlations with the dichotomous versions of many drug use dimensions than with the more detailed drug use measures (see Appendix B). In other words, it appears that enthusiasm for religion is distinctly below average for those reporting <u>any</u> use of a given drug, but beyond that distinction there is little relationship between religious commitment and <u>amount</u> of drug use. By way of contrast, the measure of truancy also shows a sharp distinction between those who have and have not ever used a given drug, but there are further strong distinctions in truancy related to amount of drug use. Accordingly, the dichotomous versions of most drug dimensions show poorer correlations with truancy than do the full eleven-category versions.

3. Although there is no single rescaling of the eleven-category drug composites which is superior in all respects, it is possible to select a version which is generally superior to the equal-interval scaling and which comes quite close to the "best possible" rescaling in most cases. Our exploratory correlational analysis included four different rescalings of the eleven-category composites (repeated for each class of drug), varying the size of the interval between the first category (never used the drug) and the second category (used it at least once, but not in the past year). We also included a simple used/never used dichotomy. The rescalings can be summarized as follows. (Note that all retain eleven separate categories, except the dichotomy.)

Original 11-category version:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Rescaled 1-12 version:	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Rescaled 1-13 version:	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Rescaled 1-14 version:	1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Rescaled 1-15 version:	1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Dichotomous version:	1, 2 (where 2 represents any use)

Based on an extensive examination of the exploratory correlation matrix, we concluded that the most generally useful alternative to the 1-11 scaling was the 1-14 scaling, i.e., the version in which the distinction between no use and some use was four times as large as the other intervals corresponding to amount of use (during the past year/past thirty days). Accordingly, that 1-14 version, as well as the 1-11 version and the dichotomous version, were included in the second correlation matrix (shown in Appendix B). An examination of Appendix B (as well as Table 11, presented and discussed below) should provide an indication of the extent to which the 1-14 version shows slightly stronger correlations than either the 1-11 version or the dichotomous version.

4. We discussed earlier the fact that alcohol use and marijuana use showed a distinctive "bi-linear" departure from simple linearity in their relationships with the other categories of drug use; and we developed a rescaling for these two dimensions which "stretched" the upper end of the scale (the "1-21" versions scaled the eleven categories 1, 2, 3, 4, 5, 6, 9, 12, 15, 18, 21). As the data in Appendix B indicate, these "stretched" versions of the alcohol use scale and the marijuana use scale are more nearly linear (and thus produce higher correlations) than the 1-11 version (or any other version we tried) when considering correlations with the so-called "hard drugs." The improvements are not at all large, but they are rather consistent: in the case of alcohol the 1-21 version correlates about .02 higher than the 1-11 version, whereas the advantage in the case of marijuana is usually .03 to .04, but sometimes less. Incidentally, this advantage of the "stretched" versions of the alcohol use and marijuana use composites holds equally well for correlations with the 1-11, 1-14, and dichotomous versions of the "hard drug" composites.

The 1-21 version is not, of course, the only possible "stretched" version which we could have developed. Other variations could have been examined; however, it seems clear that the 1-21 version comes very close to capturing all the variance that the eleven categories of alcohol use or marijuana use can possibly "explain" in the use of the other drugs. The maximum possible explained variance (both linear and non-linear) is reflected in the eta statistic resulting from a one-way analysis of variance. A comparison of product-moment correlations and the corresponding eta statistics (in each case "predicting" to the 1-11 version of each illicit drug other than marijuana) shows that the difference is seldom more than .005 (the largest is .015) when the 1-21 version of alcohol use or marijuana use is used as the predictor. Thus we conclude that the "stretched" version described here is very nearly optimal.

5. A much more modest rescaling was applied to the weight-category composite measure of cigarette use, consisting simply of a collapsing of the fourth and fifth categories. As the data in Appendix B indicate, the resulting 1-7 version of cigarette use correlates above .99 with the 1-8 version, and the two show only very

TABLE 11

Measures of Behaviors and Attitudes Correlated with Different Scaled Versions of Drug Use Composites*

	Truancy	Number of Times/Week Go Out	Religious Commitment	Respondent's H.S. Grade	Total Income Per Week	Political Beliefs
Cigarettes Composite 1-8 (eta)	.266	.254	.234	.275	.167	.128
Cigarettes Composite 1-8 (r)	.262	.252	-.229	-.277	.166	.125
Cigarettes Composite 1-7 (r)	.265	.253	-.229	-.270	.168	.126
Alcohol Composite 1-11 (eta)	.354	.358	.281	-.177	.217	.161
Alcohol Composite 1-11 (r)	.341	.354	-.276	-.166	.216	.157
Alcohol Composite 1-21 (r)	.352	.349	-.252	-.175	.199	.147
Marijuana Composite 1-11 (eta)	.408	.360	.317	.230	.197	.206
Marijuana Composite 1-11 (r)	.406	.356	-.305	-.221	.182	.204
Marijuana Composite 1-14 (r)	.394	.349	-.314	-.228	.195	.201
Marijuana Composite 1-21 (r)	.402	.350	-.286	-.212	.167	.199
Marijuana Dichotomy (r)	.291	.266	-.275	-.197	.185	.155
LSD Composite 1-11 (eta)	.240	.201	.203	.143	.084	.155
LSD Composite 1-11 (r)	.230	.185	-.182	-.125	.075	.146
LSD Composite 1-14 (r)	.237	.198	-.199	-.138	.084	.154
LSD Dichotomy (r)	.226	.195	-.199	-.139	.086	.151
Psychedelics Composite 1-11 (eta)	.267	.217	.209	.138	.099	.162
Psychedelics Composite 1-11 (r)	.252	.198	-.182	-.126	.091	.142
Psychedelics Composite 1-14 (r)	.266	.215	-.203	-.136	.100	.160
Psychedelics Dichotomy (r)	.258	.213	-.205	-.133	.100	.163
Cocaine Composite 1-11 (eta)	.280	.213	.201	.147	.102	.153
Cocaine Composite 1-11 (r)	.267	.198	-.177	-.121	.097	.150
Cocaine Composite 1-14 (r)	.278	.211	-.196	-.139	.104	.154
Cocaine Dichotomy (r)	.266	.206	-.197	-.144	.101	.144
Amphetamines Composite 1-11 (eta)	.293	.251	.214	.152	.134	.152
Amphetamines Composite 1-11 (r)	.280	.239	-.197	-.133	.125	.139
Amphetamines Composite 1-14 (r)	.290	.250	-.210	-.147	.135	.151
Amphetamines Dichotomy (r)	.271	.235	-.203	-.147	.132	.148
Quaaludes Composite 1-11 (eta)	.223	.174	.158	.099	.088	.108
Quaaludes Composite 1-11 (r)	.213	.160	-.127	-.079	.078	.098
Quaaludes Composite 1-14 (r)	.221	.174	-.148	-.091	.088	.107
Quaaludes Dichotomy (r)	.208	.171	-.155	-.095	.089	.106
Barbiturates Composite 1-11 (eta)	.227	.181	.176	.120	.080	.130
Barbiturates Composite 1-11 (r)	.214	.170	-.147	-.101	.073	.115
Barbiturates Composite 1-14 (r)	.227	.179	-.169	-.113	.080	.130
Barbiturates Dichotomy (r)	.217	.171	-.173	-.114	.079	.132
Tranquilizers Composite 1-11 (eta)	.236	.172	.165	.102	.083	.117
Tranquilizers Composite 1-11 (r)	.232	.167	-.146	-.096	.074	.112
Tranquilizers Composite 1-14 (r)	.232	.170	-.161	-.100	.084	.120
Tranquilizers Dichotomy (r)	.211	.156	-.160	-.094	.084	.116
Heroin Composite 1-11 (eta)	.099	.085	.052	.052	.044	.084
Heroin Composite 1-11 (r)	.089	.063	-.044	-.039	.034	.065
Heroin Composite 1-14 (r)	.094	.078	-.052	-.049	.042	.064
Heroin Dichotomy (r)	.088	.084	-.053	-.053	.046	.056
Narcotics Composite 1-11 (eta)	.219	.173	.160	.108	.065	.129
Narcotics Composite 1-11 (r)	.208	.160	-.136	-.102	.054	.116
Narcotics Composite 1-14 (r)	.219	.173	-.155	-.108	.063	.127
Narcotics Dichotomy (r)	.209	.169	-.158	-.104	.066	.126
Inhalants Composite 1-11 (eta)	.190	.148	.124	.118	.068	.091
Inhalants Composite 1-11 (r)	.174	.135	-.107	-.084	.056	.082
Inhalants Composite 1-14 (r)	.185	.148	-.123	-.110	.068	.090
Inhalants Dichotomy (r)	.174	.141	-.122	-.117	.069	.087

*Each pairing of a behavior or attitude measure with a drug use measure includes two levels of statistic: (1) an adjusted eta, calculated using the row variable (the drug use measure) as the predictor and the column variable as the criterion, and (2) product-moment correlations (r) based on several different scaled versions of each drug use measure. (See text for descriptions of the various scalings.)

small differences in their relationships with other variables. The 1-7 version is ever so slightly better than the 1-8 version in showing linear relationships; however, only about one in four relationships show an "advantage" as large as .005, and very rarely does the difference in correlations reach .01. Thus, a shift from the eight-category scale of cigarette use to a 1-7 rescaled version would produce only very trivial "gains" in linearity. For most other purposes we prefer to retain the eight-category version, because the fourth and fifth categories are qualitatively different; therefore, any use of the 1-7 rescaled version would be in addition to the very similar 1-8 version—and we judge that to be more trouble than it is worth.

6. We noted earlier that the relationships among the illicit drug dimensions other than marijuana appeared to be basically linear, judging from the results of our one-way analyses of variance. Those analyses were limited, however, to the use of the 1-11 versions of the drug composites as criterion variables. Thus the possibility remains that the 1-11 versions of the drug composites might fail to indicate the strongest possible linear association among drug use dimensions. As a byproduct of our exploration of the other rescaling issues discussed above, we were able to compare the correlations among all combinations of the several rescaled versions of each of the drug use dimensions. Some of those combinations (those involving the 1-11, 1-14, and dichotomous versions) are included in Appendix B, and that appendix material should be sufficient to permit the interested reader to verify that the 1-11 versions of the various drugs often slightly underestimate the strength of association that exists between two dimensions of drug use. Therefore, if a single version were to be selected for all drug categories, the 1-14 version would be preferable to the 1-11 version. However, the more important conclusions to be drawn from an examination of this portion of the correlational data are simply an echoing of two points made earlier: no single rescaling works best in all instances, but in most instances the differences in size of correlation are not very large.

A Further Look at Linearity. We have stated at several points in this paper that one of our objectives in scaling our measures of drug use is to maximize the extent to which their association with other key measures is linear. Whenever the scaling of the "other key measure" is taken as a given (i.e., if it is not also subject to possible rescaling), then one fairly simple and convenient way of appraising the degree to which an association is linear rather than curvilinear is to contrast the eta statistic and the (unsigned) product-moment correlation. Both are measures of correlation, and the squared value of each is a measure of explained variance. The key difference between them is that the eta statistic captures both linear and non-linear association, whereas the product-moment correlation captures only the linear portion. Accordingly, when the two statistics are nearly identical it indicates that nearly all of the association between the variables is linear.

Table 11 presents a comparison of eta statistics and product-moment correlations for each of the drug composite measures related to each of the six non-drug measures.* The table entries indicate quite clearly that the composites,

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*The eta statistic in the table have been adjusted for degrees of freedom. This represents an extremely small reduction from the unadjusted eta (given the large number of cases in our analyses); nevertheless, the result in several instances is that the product-moment correlation is actually a tiny bit larger than the corresponding eta—a "theoretically impossible" outcome that simply relects the adjustment for degrees of freedom.

particularly the 1-14 rescaled versions, show product-moment correlations extremely close to the corresponding eta statistics (very few of the differences for the 1-14 versions are as large as .01). This indicates a very high degree of linearity for the drug composites (scaled 1-14) when related to the six background, recent experience, and lifestyle dimensions.

Comparing the Composites with their Ingredients. One of our objectives in developing the composite measures was that we not "lose information;" more specifically, we prefer that the composite measures be at least as "successful" as any of their individual ingredients when it comes to correlating with other measures. In order to examine and demonstrate the extent to which this objective is met, we included the individual item ingredients for each of the drug composite measures in the large correlation matrix reproduced in Appendix B. The interested reader can explore a great variety of comparisons in that appendix, but for present purposes a few summary observations will suffice:

1. Almost without exception, each composite drug measure shows stronger correlations with the six non-drug measures than do any of the ingredients for that drug composite. As noted earlier, the 1-11 scaling of alcohol use and of marijuana use generally produce the strongest correlations with the non-drug measures, while the 1-14 rescaling works best for the other illicit drugs.

2. Interestingly, when we compare the different ingredients (lifetime use, annual use, use in last thirty days) we find some systematic variations in terms of which correlates most strongly with the non-drug measures. In the case of illicit drugs other than marijuana, the lifetime use measures show consistently stronger correlations with the non-drug measures than do the measures of use during the past year; and the lowest correlations are consistently shown by the measures of use during the past thirty days. This is not at all surprising, since illicit drug use is fairly rare and the lifetime measures thus provide more information (greater variance) than the measures of use during the past year or month.

3. But in the case of marijuana use and alcohol use, the comparison between lifetime, annual, and past month use is more mixed. The measures of truancy and of frequency of going out for fun and recreation both show their strongest correlations with the reports of use during the past month, whereas the presumably more stable dimension of religious commitment shows weaker correlations with the monthly use measures than with the measures for annual and lifetime use. One possible explanation is that truancy and "going out" are based on recent time intervals and thus correlated measurement error might tend to heighten their association with thirty-day use more than with the longer time intervals. But it is also quite possible that short term fluctuations in truancy and "going out" actually cause (or at least are associated with) short-term fluctuations in drug use.

4. Moving to the examination of relationships in which use of one class of illicit drugs is correlated with use of another class, we find that the measures of lifetime use show consistently stronger correlations with one another than do the measures of use based on shorter intervals. In other words, lifetime usage measures for marijuana and amphetamines correlate more strongly with each other than do annual measures or the thirty-day measures. This holds without exception for every class of illicit drug (but not for all relationships between illicit drugs and alcohol). The point made above (#2) applies here also: because illicit use of drugs (other than marijuana) is generally rather rare, the lifetime measures provide much more information than do the measures covering shorter intervals.

5. Given the above observations, it is useful to consider whether the lifetime use measures for illicit drugs (particularly those other than marijuana) show stronger intercorrelations than the corresponding correlations involving the composites. A comparison of all such combinations (using the 1-14 rescaled versions of the composites) revealed that in most cases the differences were .03 or smaller, but in the majority of cases slightly larger coefficients were obtained when lifetime measures were correlated with each other rather than when the composites (1-14) were correlated with each other. The differences were larger than .03 for relationships among three drug categories—quaaludes, barbiturates, and tranquilizers.

We can sum up this comparison of the composites with their ingredients by saying that for the three most frequently used drug classes we have considered—cigarettes, alcohol, and marijuana—the composite measures consistently correlate a bit better than any of their ingredients when related to illicit drug measures and to non-drug measures. (This is particularly true when the alcohol use and the marijuana use composites are scaled optimally—e.g., the 1-21 version—when used to relate to other illicit drugs.) The composite measures for the ten other drug classes explored here also surpass their ingredients slightly in correlations with non-drug measures; however, it is more often than not the case that the highest correlations between two classes of drugs are found using the lifetime use measures rather than the more elaborate composite measures. Thus if one were concentrating primarily on analyses of poly-drug use (particularly drugs other than marijuana), one might best make use of the individual measures of drug use—particularly lifetime use—rather than relying on the composites. But for most other analyses, it appears that the composites do indeed meet our criterion of providing more information (and thus higher correlations) than any one of their ingredients.

Summary

This analysis of the Monitoring the Future survey of the high school senior class of 1978 has focused on self-reports of use of cigarettes, alcohol, marijuana, and ten other categories of drugs during the lifetime, the past year, and the past thirty days. In particular, we have sought to develop composite measures of frequency of use for each of these categories of drugs.

Concentrating first on alcohol and marijuana use, we examined relationships between lifetime and annual use reports (Tables 1 and 3), and then between annual and thirty-day use reports (Tables 2 and 4). Of special importance is the finding that reported use during the past thirty days is systematically higher (by a factor of two to four times) than would be predicted based on reported use during the past year. To put it a different way, annual rates of use are substantially lower than we would expect judging from rate of use reported during the last month. Given that this pattern appears across a wide range of drugs, given that it occurs for respondents one and two years beyond high school as well as for those late in their senior year, and given that other researchers have found somewhat similar disparities in recollection when shorter and longer intervals are compared, we tentatively conclude that the self-reports for use during the past year substantially underestimate the frequency of use for those who use a drug more than a handful of times during the year.

Bearing in mind this inconsistency between monthly and annual usage data, we set about to develop a composite measure of drug use which would combine information about lifetime, annual, and thirty-day use. The resulting composite measures are displayed in Tables 5, 6 and 8.

When we examined the interrelationships among all the composite measures, we found associations that could be characterized as linear (illustrated in Figure 1), step/linear (Figures 2 and 3), or bi-linear (Figure 4). Table 10 presents a summary of the various combinations of drugs and selected other measures which can be characterized as meeting each of these three patterns.

We found that two relatively simple rescalings would suffice to convert the step/linear and bi-linear patterns into essentially linear relationships. This is illustrated for some relationships in Table 11, and documented more extensively in Appendix B. Also amply documented in Appendix B is the fact that the composite measures (appropriately rescaled) do meet our criterion of providing more information—and thus higher correlations—than any one of their ingredients.

Based on these several analyses, we conclude that the composite measures are well-suited for correlational analyses with a variety of other dimensions, and can generally be used in place of the set of the three separate measures (lifetime, annual, monthly) for each drug in the Monitoring the Future study.

APPENDIX A

Research Design and Procedures*

The basic research design involves annual data collections from high school seniors during the spring of each year, beginning with the class of 1975. Each data collection takes place in approximately 125-130 public and private high schools selected to provide an accurate cross section of high school seniors throughout the coterminous United States. The design also provides for the longitudinal study of a subsample from each class of participating seniors; but since the focus of the present analysis is exclusively on the data collected from seniors in 1978, the follow-up procedures will not be discussed here.

One limitation in the design is that it does not include in the target population those young men and women who drop out of high school before graduation (or before the last few months of the senior year, to be more precise). This excludes a relatively small proportion of each age cohort—between 15 and 20 percent (Golladay, 1976, 1977)—though not an unimportant segment, since we know that certain behaviors such as illicit drug use (Johnston, 1973) and delinquency (Bachman, O'Malley, and Johnston, 1978) tend to be higher than average in this group. For the purposes of estimating characteristics of the entire age group, the omission of high school dropouts does introduce certain biases; however, their small proportion sets outer limits on the bias.

Sampling Procedures. The procedure for securing a nationwide sample of high school seniors is a multi-stage one. Stage 1 is the selection of particular geographic areas, Stage 2 is the selection of one or more high schools in each area, and Stage 3 is the selection of seniors within each high school.

Stage 1: Geographic Areas. The geographic areas used in this study are the primary sampling units (PSUs) developed by the Sampling Section of the Survey Research Center for use in the Center's nationwide interview studies. These consist of 74 primary areas throughout the coterminous United States—including the 12 largest metropolitan areas, which contain about 30 percent of the nation's population. Of the 62 other primary areas, 10 are in the Northeast, 18 in the North Central area, 24 in the South, and 10 in the West. Because these same PSUs are used for personal interview studies by the Survey Research Center (SRC), local field representatives can be assigned to administer the data collections in practically all schools.

Stage 2: Schools. In the major metropolitan areas more than one high school is often included in the sampling design; in most other sampling areas a single high school is sampled. In all cases, the selections of high schools are made such that the probability of drawing a school is proportionate to the size of its senior class. The larger the senior class (according to recent records), the higher the selection

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*A more extensive description of the research design and procedures may be found in Bachman and Johnston (1978).

probability assigned to the high school. When a sampled school is unwilling to participate, a replacement school as similar to it as possible is selected from the same geographic area.

Stage 3: Students. Within each selected school, up to about 400 seniors may be included in the data collection. In schools with fewer than 400 seniors, the usual procedure is to include all of them in the data collection. In larger schools, a subset of seniors is selected either by randomly sampling classrooms or by some other random method that is convenient for the school and judged to be unbiased. Sample weights are assigned to each respondent so as to take account of variations in the sizes of samples from one school to another, as well as the (smaller) variations in selection probabilities occuring at the earlier stages of sampling.

The three-stage sampling procedure described above yielded the number of participating schools and students indicated in the table below.

Sample Sizes and Student Response Rates:
Senior Class of 1978

Number of Public Schools	111
Number of Private Schools	20
Total Number of Schools	131
Actual Number of Participating Students	18924
Number of Weighted Cases (Total)*	18924
Student Response Rates**	83%

*Sample weights are assigned to each respondent to correct for unequal probabilities of selection which arise in the multi-stage sampling procedure.

**The student response rate is derived by dividing the attained sample by the target sample (both based on weighted numbers of cases). The target sample is based upon listings provided by schools. Since such listings may fail to take account of recent student attrition, the actual response rate may be slightly underestimated.

Advance Contact with Teachers and Students. The local SRC representative is instructed to visit each participating school two weeks ahead of the actual date of administration. This visit serves as an occasion to meet the teachers whose classes will be affected and to provide them with a brochure describing the study, a brief set of guidelines about the questionnaire administration, and a supply of flyers to be distributed to the students a week to 10 days in advance of the questionnaire administration. The guidelines to the teachers include a suggested announcement to students at the time the flyers are distributed.

From the students' standpoint, the first information about the study usually consists of the teacher's announcement and the short descriptive flyer. In announcing the study, the teachers are asked to stress that the questionnaires used in the survey are not tests, and that there are no right or wrong answers. The flyer tells students that they will be invited to participate in the study, points out that their participation is strictly voluntary, and stresses confidentiality (including a reference to the fact that the Monitoring the Future project has a special government grant of confidentiality which allows their answers to be protected). The flyer also serves as an informative document which the students can show to their parents.

Questionnaire Administrations. The questionnaire administration in each school is carried out by the local SRC representatives and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during normal class periods whenever possible, although circumstances in some schools require the use of larger group administrations. Teachers are not asked to do anything more than introduce the SRC staff members and (in most cases) remain in the classroom to help guarantee an orderly atmosphere for the survey. Teachers are urged to avoid walking around the room, so that students may feel free to write their answers without fear of being observed.

The actual process of completing the questionnaires is quite straightforward. Respondents are given sharpened pencils and asked to use them because the questionnaires are designed for automatic scanning. Most respondents can finish within a 45-minute class period; for those who cannot, an effort is made to provide a few minutes of additional time.

Procedures for Protecting Confidentiality. In any study that relies on voluntary reporting of drug use or other illegal acts, it is essential to develop procedures which guarantee the confidentiality of such reports. It is also desirable that these procedures be described adequately to respondents so that they are comfortable about providing honest answers.

We noted that the first information given to students about the survey consists of a descriptive flyer stressing confidentiality and voluntary participation. This theme is repeated at the start of the questionnaire administration. Each participating student is instructed to read the message on the cover of the questionnaire, which stresses the importance and value of the study, notes that answers will be kept strictly confidential, states that the study is completely voluntary, and tells the student "If there is any question you or your parents would find objectionable for any reason, just leave it blank." The instructions then point out that in a few months a summary of nationwide results will be mailed to all

participants and also that a follow-up questionnaire will be sent to some students after a year. The cover message explains that these are the reasons for asking that name and address be written on a special form which will be removed from the questionnaire and handed in separately. The message also points out that the two different code numbers (one on the questionnaire and one on the tear-out form) cannot be matched except by a special computer tape at The University of Michigan.

GUIDE TO ABBREVIATED VARIABLE NAMES USED IN CORRELATION MATRIX

VARIABLE NAME[1]	VARIABLE NUMBER[2]		ITEM REFERENCE NUMBER[3]
705C03 :R'S SEX	V5150	Sex of respondent. 1=male, 2=female.	00030
TRUANCY 10-65	B6176	10=no truancy in last 4 weeks 65=extremely high truancy last 4 weeks	---
705C25 :#I/AV NE GO OUT	V5190	Average number of evenings out for recreation per week.	00620
RELIGOUS COMMITMENT	B6169	Importance rating plus frequency of attendance. 10=low, 40=high	---
705C20 :R HS GRADE/D=1	V5179	Respondent's self-reported average grade in high school.	00470
$/WEEK TOT INCOME 1-7	:5192	Total income per week, job and other sources.	---
705C12 :R'POL BLF RADCL	V5167	Political beliefs. 1=Very Conservative, 5=Very Liberal, 6=Radical	00350
705 :DRUGINDX[1=NONE	V5052	Drug Use Index in Lifetime. None/MJ/pills/more pills/heroin.	---
70 CIGARET COMPOSIT 1-8	B1	Cigarette Use. 1=Never smoked, 8=Smoke 1 1/2 pack or more a day.	---
CIGARETTE CHP 1-7	B15	Cigarette Use, Rescaled version of 1-8 above.	---
705B01 :EVR SMK CIG,REGL	V5101	"Have you ever smoked cigarettes?"	00760
705B02 :#CIGS SMKD/30DAY	V5102	"How frequently have you smoked cigarettes during the past 30 days?"	00770
70 ALCOHOL COMPOSIT 1-11	B33	Alcohol Use Composite. 1=Never used, 11=Used 40+ times last month.	---
ALCOHOL CHP 1-21	B16	A "stretched" version of the Alcohol Use Composite.	---
705B04A:#I DRNK/LIFETIME	V5104	Number of occasions had alcoholic drink in lifetime.	00810
705B04B:#I DRNK/LAST12MO	V5105	Number of occasions had alcoholic drink in last 12 months.	00820
705B04C:#I DRNK/LAST30DA	V5106	Number of occasions had alcoholic drink in last 30 days.	00830
70 MARI COMPOSIT 1-11	B55	Marijuana and/or Hashish Use Composite.	---
MARIJUANA CHP 1-14	B20	Marijuana/Hashish 1-14 version.	---
MARIJUANA DICH	B23	Marijuana/Hashish Dichotomy. Never Used/Used.	---
MARIJUANA CHP 1-21	B17	A "stretched" version of the Marijuana Use Composite 1-21 version.	---
705B07A:#TMJ+HS/LIFETIME	V5115	Number of occasions marijuana (hashish) used in lifetime.	10860
705B07B:#TMJ+HS/LAST12MO	V5116	Number of occasions marijuana (hashish) used in last 12 months.	00870
705B07C:#TMJ+HS/LAST30DA	V5117	Number of occasions marijuana (hashish) used in last 30 days.	00880
LSD COMPOSITE 1-11	B6118	LSD ("acid") Use Composite.	---
LSD COMPOSITE 1-14	B26	LSD ("acid") Use Composite 1-14 version.	---
LSD DICHOTOMY	B28	LSD ("acid") Use Dichotomy. Never Used/Used.	---
705B08A:#I LSD/LIFETIME	V5118	Number of occasions LSD used in lifetime.	00890
705B08B:#I LSD/LAST 12MO	V5119	Number of occasions LSD used in last 12 months.	00900
705B08C:#I LSD/LAST 30DA	V5120	Number of occasions LSD used in last 30 days.	00910
PSYD COMPOSITE 1-11	B6121	Other Psychedelics (mescaline, peyote, PCP, etc.) Use Composite.	---
PSYD COMPOSITE 1-14	B36	1-14 version.	---
PSYD DICHOTOMY	B38	Psychedelics Dichotomy. Never Used/Used.	---
705B09A:#I PSYD/LIFETIME	V5121	Number of occasions other psychedelics used in lifetime.	00920
705B09B:#I PSYD/LAST12MO	V5122	Number of occasions other psychedelics used in last 12 months.	00930
705B09C:#I PSYD/LAST30DA	V5123	Number of occasions other psychedelics used in last 30 days.	00940
COKE COMPOSITE 1-11	B6124	Cocaine ("coke") Use Composite.	---
COKE COMPOSITE 1-14	B46	1-14 version.	---
COKE DICHOTOMY	B62	Dichotomy, Never Used/Used.	---
705B10A:#I COKE/LIFETIME	V5124	Number of occasions cocaine used in lifetime.	00950
705B10B:#I COKE/LAST12MO	V5125	Number of occasions cocaine used in last 12 months.	00960
705B10C:#I COKE/LAST30DA	V5126	Number of occasions cocaine used in last 30 days.	00970

AMPH COMPOSITE 1-11	V6127	Amphetamines (uppers, speed, bennies, etc.) Use Composite.	---
AMPH COMPOSITE 1-14	V56	1-14 version.	---
AMPH DICHOTOMY	V41	Dichotomy, Never Used/Used.	---
705B11A:0I AMPH/LIFETIME	V5127	Number of occasions amphetamines used in lifetime.	00980
705B11B:0I AMPH/LAST12MO	V5128	Number of occasions amphetamines used in last 12 months.	00990
705B11C:0I AMPH/LAST30DA	V5129	Number of occasions amphetamines used in last 30 days.	01000
QUAD COMPOSITE 1-11	V6130	Quaaludes (quads, soapers, methaqualone) Use Composite.	---
QUAD COMPOSITE 1-14	V69	1-14 version.	---
QUAD DICHOTOMY	V42	Dichotomy, Never Used/Used.	---
705B12A:0I QUAD/LIFETIME	V5130	Number of occasions quaaludes used in lifetime.	01010
705B12B:0I QUAD/LAST12MO	V5131	Number of occasions quaaludes used in last 12 months.	01020
705B12C:0I QUAD/LAST30DA	V5132	Number of occasions quaaludes used in last 30 days.	01030
BRBT COMPOSITE 1-11	V6133	Barbiturates (downers, goofballs, rainbows) Use Composite.	---
BRBT COMPOSITE 1-14	V76	1-14 version.	---
BRBT DICHOTOMY	V43	Dichotomy, Never Used/Used.	---
705B13A:0I BRBT/LIFETIME	V5133	Number of occasions barbiturates used in lifetime.	01040
705B13B:0I BRBT/LAST12MO	V5134	Number of occasions barbiturates used in last 12 months.	01050
705B13C:0I BRBT/LAST30DA	V5135	Number of occasions barbiturates used in last 30 days.	01060
TRQL COMPOSITE 1-11	V6136	Tranquilizers (Librium, Valium, Miltown) Use Composite.	---
TRQL COMPOSITE 1-14	V86	1-14 version.	---
TRQL DICHOTOMY	V51	Dichotomy, Never Used/Used.	---
705B14A:0I TRQL/LIFETIME	V5136	Number of occasions tranquilizers used in lifetime.	01070
705B14B:0I TRQL/LAST12MO	V5137	Number of occasions tranquilizers used in last 12 months.	01080
705B14C:0I TRQL/LAST30DA	V5138	Number of occasions tranquilizers used in last 30 days.	01090
HEROIN COMPOSITE 1-11	V6139	Heroin (smack, horse, skag) Use Composite.	---
HEROIN COMPOSITE 1-14	V96	1-14 version.	---
HEROIN DICHOTOMY	V52	Dichotomy, Never Used/Used.	---
705B15A:0I "H"/LIFETIME	V5139	Number of occasions heroin used in lifetime.	01100
705B15B:0I "H"/LAST 12MO	V5140	Number of occasions heroin used in last 12 months.	01110
705B15C:0I "H"/LAST 30DA	V5141	Number of occasions heroin used in last 30 days.	01120
NARC COMPOSITE 1-11	V6142	Other Narcotics(Methadone, opium, morphine, etc.) Use Composite.	---
NARC COMPOSITE 1-14	V106	1-14 version.	---
NARC DICHOTOMY	V53	Dichotomy, Never Used/Used.	---
705B16A:0I NARC/LIFETIME	V5142	Number of occasions other narcotics used in lifetime.	01130
705B16B:0I NARC/LAST12MO	V5143	Number of occasions other narcotics used in last 12 months.	01140
705B16C:0I NARC/LAST30DA	V5144	Number of occasions other narcotics used in last 30 days.	01150
INHL COMPOSITE 1-11	V6145	Inhalants (glue, aerosol spray cans) Use Composite.[4]	---
INHL COMPOSITE 1-14	V116	1-14 version.	---
INHL DICHOTOMY	V61	Dichotomy, Never Used/Used.	---
705B17A:0I INHL/LIFETIME	V5145	Number of occasions inhalants used in lifetime.	01160
705B17B:0I INHL/LAST12MO	V5146	Number of occasions inhalants used in last 12 months.	01170
705B17C:0I INHL/LAST30DA	V5147	Number of occasions inhalants used in last 30 days.	01180

[1]Variable name as it appears in correlation matrix (and in the computer analyses output).

[2]Variable number used in data analyses and management, also appears in correlation matrix.

[3]Item reference number. A unique reference number for each variable exists. Used in data volumes; Bachman et al. (1980, a, b), Johnston & Bachman (1980), Johnston et al. (1980).

[4]Inhalant use questions are only asked in questionnaire forms 2-5.

791128 004245 NDC

NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SRUN:NDC.APPI)

TOTAL CASE COUNT: 18524

TOTAL WEIGHT SUM: 18920.0

VARIABLE NAME	VARIABLE	N	WEIGHTED N	MEAN	STANDARD DEVIATION	RANGE MIN	RANGE MAX
785C03 :R'S SEX	V5150	18019	18052	1.518	0.500	1.000	2.000
TRUANCY 10-65	B6176	16773	16874	16.762	10.012	10.000	65.000
785C25 :#X/AT HK GO OUT	V5194	17427	17571	3.611	1.327	1.000	6.000
RELIGOUS COMMITMENT	B6169	18045	18183	28.227	8.870	20.000	80.000
785C20 :R HS GRADE/E=1	V5179	17728	17850	5.714	1.913	1.000	9.000
S/WEEK TOT INCOME 1-7	B6192	17363	17485	4.935	1.936	1.000	7.000
785C12 :R'POL BLF RADCL	V5167	13058	13050	3.196	1.035	1.000	6.000
785 :SMGIBBI 1=NONE	V5052	18278	18304	2.240	1.195	1.000	5.000
78 CIGARET COMPOSIT 1-8	B1	18349	18367	3.157	2.052	1.000	8.000
CIGARETTE CMP 1-7	B15	18349	18367	2.883	1.670	1.000	7.000
785B01 :EVR SMK CIG,REGL	V5101	18461	18473	2.782	1.489	1.000	5.000
785B02 :#CIGS SMKD/30DAY	V5102	18429	18448	1.950	1.457	1.000	7.000
78 ALCOHOL COMPOSIT 1-11	B33	17460	17354	5.512	2.503	1.000	11.000
ALCOHOL CMP 1-21	B16	17400	17354	7.079	4.812	1.000	21.000
785B04A:#X DRNK/LIFETIME	V5104	17615	17588	5.323	1.987	1.000	7.000
785B04B:#X DRNK/LAST12MO	V5105	17547	17515	4.372	2.063	1.000	7.000
785B04C:#X DRNK/LAST30DA	V5106	17601	17550	2.791	1.601	1.000	7.000
78 MARI COMPOSIT 1-11	B55	17937	17951	3.850	3.296	1.000	11.000
MARIJUANA CMP 1-14	B20	17937	17951	5.615	4.481	1.000	14.000
MARIJUANA DICH	B23	17937	17951	1.589	0.892	1.000	2.000
MARIJUANA CMP 1-21	B17	17937	17951	5.267	6.034	1.000	21.000
785B07A:#XNJ+HS/LIFETIME	V5115	18073	18097	3.519	2.568	1.000	7.000
785B07B:#XNJ+HS/LAST12MO	V5116	18009	18018	2.966	2.388	1.000	7.000
785B07C:#XNJ+HS/LAST30DA	V5117	18014	18028	2.206	1.905	1.000	7.000
LSD COMPOSITE 1-11	B6118	18304	18329	1.205	0.742	1.000	11.000
LSD COMPOSITE 1-14	B26	18304	18329	1.492	1.563	1.000	14.000
LSD DICHOTOMY	B28	18304	18329	1.096	0.294	1.000	2.000
785B08A:#X LSD/LIFETIME	V5118	18331	18358	1.216	0.806	1.000	7.000
785B08B:#X LSD/LAST 12MO	V5119	18320	18348	1.110	0.510	1.000	7.000
785B08C:#X LSD/LAST 30DA	V5120	18316	18344	1.031	0.248	1.000	7.000
PSID COMPOSITE 1-11	B6121	18227	18253	1.255	0.857	1.000	11.000
PSID COMPOSITE 1-14	B36	18227	18253	1.599	1.733	1.000	14.000
PSID DICHOTOMY	B38	18227	18253	1.115	0.318	1.000	2.000
785B09A:#X PSID/LIFETIME	V5121	18261	18287	1.274	0.926	1.000	7.000
785B09B:#X PSID/LAST12MO	V5122	18238	18264	1.141	0.609	1.000	7.000
785B09C:#X PSID/LAST30DA	V5123	18229	18254	1.042	0.294	1.000	7.000
CCRE COMPOSITE 1-11	B6124	18166	18205	1.303	0.958	1.000	11.000
CORE COMPOSITE 1-14	B46	18166	18205	1.684	1.872	1.000	14.000
CORE DICHOTOMY	B62	18166	18205	1.127	0.333	1.000	2.000
785B10A:#X CORE/LIFETIME	V5124	18203	18237	1.272	0.890	1.000	7.000
785B10B:#X CORE/LAST12MO	V5125	18178	18215	1.174	0.683	1.000	7.000
785B10C:#X CORE/LAST30DA	V5126	18175	18213	1.065	0.385	1.000	7.000
AMPH COMPOSITE 1-11	B6127	18100	18113	1.676	1.562	1.000	11.000
AMPH COMPOSITE 1-14	B56	18100	18113	2.354	2.675	1.000	14.000
AMPH DICHOTOMY	B61	18100	18113	1.226	0.418	1.000	2.000
785B11A:#X AMPH/LIFETIME	V5127	18161	18181	1.688	1.53[illegible]	1.000	7.000
785B11B:#X AMPH/LAST12MO	V5128	18122	18116	1.438	1.178	1.000	7.000
785B11C:#X AMPH/LAST30DA	V5129	18107	18123	1.176	0.603	1.000	7.000
QUAD COMPOSITE 1-11	B6130	18119	18147	1.180	0.758	1.000	11.000

VARIABLE NAME	VARIABLE	N	WEIGHTED N	MEAN	STANDARD DEVIATION	RANGE MIN	RANGE MAX
QUAD COMPOSITE 1-14	B69	18119	18147	1.813	1.888	1.000	14.000
QUAD DICHOTOMY	B42	18119	18147	1.078	0.268	1.000	2.000
785B12A:0I QUAD/LIFETIME	V5130	18139	18167	1.188	0.786	1.000	7.000
785B12B:0I QUAD/LAST12MO	V5131	18130	18158	1.101	0.542	1.000	7.000
785B12C:0I QUAD/LAST30DA	V5132	18127	18156	1.032	0.275	1.000	7.000
BRBT COMPOSITE 1-11	B6133	18075	18097	1.312	0.985	1.000	11.000
BRBT COMPOSITE 1-14	B76	18075	18097	1.718	1.909	1.000	14.000
BRBT DICHOTOMY	B43	18075	18097	1.135	0.342	1.000	2.000
785B13A:0I BRBT/LIFETIME	V5133	18114	18140	1.389	1.068	1.000	7.000
785B13B:0I BRBT/LAST12MO	V5134	18090	18116	1.175	0.718	1.000	7.000
785B13C:0I BRBT/LAST30DA	V5135	18085	18110	1.061	0.395	1.000	7.000
TRQL COMPOSITE 1-11	B6136	18045	18076	1.363	1.004	1.000	11.000
TRQL COMPOSITE 1-14	B86	18045	18076	1.866	2.019	1.000	14.000
TRQL DICHOTOMY	B51	18045	18076	1.168	0.374	1.000	2.000
785B14A:0I TRQL/LIFETIME	V5136	18097	18130	1.391	1.076	1.000	7.000
785B14B:0I TRQL/LAST12MO	V5137	18068	18099	1.194	0.718	1.000	7.000
785B14C:0I TRQL/LAST30DA	V5138	18053	18086	1.059	0.370	1.000	7.000
HEROIN COMPOSITE 1-11	B6139	18136	18176	1.013	0.336	1.000	11.000
HEROIN COMPOSITE 1-14	B96	18136	18176	1.082	0.673	1.000	14.000
HEROIN DICHOTOMY	B52	18136	18176	1.016	0.126	1.000	2.000
785B15A:0I "H"/LIFETIME	V5139	18141	18180	1.031	0.301	1.000	7.000
785B15B:0I "H"/LAST 12MO	V5140	18142	18182	1.016	0.224	1.000	7.000
785B15C:0I "H"/LAST 30DA	V5141	18142	18184	1.008	0.160	1.000	7.000
HARC COMPOSITE 1-11	B6142	17969	18009	1.217	0.808	1.000	11.000
HARC COMPOSITE 1-14	B106	17969	18009	1.510	1.619	1.000	14.000
HARC DICHOTOMY	B53	17969	18009	1.098	0.297	1.000	2.000
785B16A:0I HARC/LIFETIME	V5142	17996	18037	1.223	0.835	1.000	7.000
785B16B:0I HARC/LAST12MO	V5143	17984	18022	1.118	0.572	1.000	7.000
785B16C:0I HARC/LAST30DA	V5144	17975	18014	1.037	0.303	1.000	7.000
INHL COMPOSITE 1-11	B6145	14613	14645	1.202	0.734	1.000	11.000
INHL COMPOSITE 1-14	B116	14613	14645	1.558	1.598	1.000	14.000
INHL DICHOTOMY	B61	14613	14645	1.117	0.322	1.000	2.000
785B17A:0I INHL/LIFETIME	V5145	14648	14682	1.233	0.805	1.000	7.000
785B17B:0I INHL/LAST12MO	V5146	14623	14654	1.082	0.493	1.000	7.000
785B17C:0I INHL/LAST30DA	V5147	14617	14647	1.029	0.292	1.000	7.000

CORRELATIONS

		V5150 785C03 : R'S SEX	R6176 TRUANCY 10-65	V5198 785C25 : 8X/AY WK GO OUT	R6169 RELIGOUS COMMITM ENT	V5179 785C20 : R HS GRA DE/D=1	R6192 $/WEEK T OT INCOM E 1-7	V5167 785C12 : R'POL BL P BADCL	V5052 785 : DRUGINDX 1=NONE	R1 : 78 CIGAR ET COMPO SIT 1-8	R15 CIGARETT E CMP 1-7	V5101 785B01 : RYR SMK CIG,REGL
TRUANCY 10-65	R6176	-0.0993										
785C25 :8X/AY WK GO OUT	V5198	-0.0894	0.2589									
RELIGOUS COMMITMENT	R6169	0.1820	-0.2184	-0.0966								
785C20 :R HS GRADE/D=1	V5179	0.1581	-0.2115	-0.1350	0.1653							
$/WEEK TOT INCOME 1-7	R6192	-0.1528	0.1483	0.1205	-0.0989	-0.0731						
785C12 :R'POL BLP BADCL	V5167	0.0164	0.1206	0.0968	-0.1615	-0.0382	0.0186					
785 LIFE:DRUGINDX 1=NONE	V5052	-0.0472	0.3834	0.2779	-0.2716	-0.2006	0.1748	0.1852				
78 CIGARET COMPOSIT 1-8	R1	0.0205	0.2624	0.2524	-0.2286	-0.2725	0.1664	0.1285	0.5126			
CIGARETTE CMP 1-7	R15	0.0182	0.2653	0.2529	-0.2285	-0.2703	0.1678	0.1262	0.5176	0.9923		
785B01 :RYR SMK CIG,REGL	V5101	0.0434	0.2458	0.2829	-0.2141	-0.2621	0.1573	0.1211	0.5085	0.9891	0.9527	
785B02 :8CIGS SMKD/30DAY	V5102	0.0066	0.2458	0.2334	-0.2142	-0.2587	0.1506	0.1135	0.4500	0.9248	0.8913	0.8033
78 ALCOHOL COMPOSIT 1-11	R33	-0.1911	0.3407	0.3538	-0.2761	-0.1660	0.2161	0.1568	0.4937	0.8312	0.8413	0.8322
ALCOHOL CMP 1-21	R16	-0.2014	0.3516	0.3486	-0.2521	-0.1786	0.1992	0.1466	0.4697	0.8073	0.8151	0.3985
785B04A:8X DRNK/LIFETIME	V5104	-0.1596	0.2792	0.2979	-0.2690	-0.1342	0.1970	0.1496	0.4826	0.8233	0.8365	0.8180
785B04B:8X DRNK/LAST12MO	V5105	-0.1826	0.3194	0.3401	-0.2699	-0.1496	0.2154	0.1529	0.4863	0.8220	0.8317	0.8271
785B04C:8X DRNK/LAST30DA	V5106	-0.1814	0.3468	0.3609	-0.2436	-0.1885	0.1998	0.1332	0.4572	0.8099	0.8155	0.3980
78 MARI COMPOSIT 1-11	R55	-0.1476	0.4059	0.3556	-0.3045	-0.2213	0.1821	0.2037	0.7152	0.5302	0.5307	0.5169
MARIJUANA CMP 1-14	R20	-0.1436	0.3943	0.3488	-0.3148	-0.2278	0.1948	0.2009	0.7897	0.5586	0.5579	0.5509
MARIJUANA EVER	R23	-0.1061	0.2911	0.2661	-0.2786	-0.1978	0.1888	0.1550	0.6789	0.4992	0.5080	0.5176
MARIJUANA CMP 1-21	R17	-0.1520	0.4021	0.3501	-0.2860	-0.2121	0.1668	0.1990	0.6639	0.4912	0.4908	0.4693
785B07A:8XMJ+HS/LIFETIME	V5115	-0.1231	0.3721	0.3211	-0.3042	-0.2193	0.1924	0.1898	0.7387	0.5526	0.5562	0.5582
785B07B:8XMJ+HS/LAST12MO	V5116	-0.1375	0.3891	0.3391	-0.2930	-0.2090	0.1742	0.1952	0.6876	0.5089	0.5087	0.4976
785B07C:8XMJ+HS/LAST30DA	V5117	-0.1411	0.3956	0.3425	-0.2677	-0.2137	0.1557	0.1872	0.6268	0.4690	0.4658	0.4835
LSD COMPOSITE 1-11	R6118	-0.0708	0.2296	0.1852	-0.1815	-0.1285	0.0746	0.1459	0.4852	0.2863	0.2869	0.2592
LSD COMPOSITE 1-14	R26	-0.0726	0.2368	0.1977	-0.1985	-0.1175	0.0819	0.1588	0.4888	0.3197	0.3205	0.2938

CORRELATIONS

		V5150 785C03 : R'S SEX	R6176 IBOARCY 10-65	V5194 785C25 : 0I/AY BK GO OUT	R6169 RELIGIOUS COMMITM ENT	V5179 785C20 : R HS GRA DE/D=1	R6192 $/WEEK T OT INCOM E 1-7	V5167 785C12 : R'PCL PL P PADCL	V5052 785 : DRUGINDX (1=NONE	B1 78 CIGAR ETT COMPO SIT 1-8	B15 CIGARETT E CMP 1-7	V5101 785B01 : PYR SMK CIG,PPGL
LSD DICHOTOMY	B28	-0.0692	0.2264	0.1946	-0.1990	-0.1190	0.0859	0.1510	0.4928	0.3258	0.3268	0.3017
785B08A:0I LSD/LIFETIME	V5118	-0.0628	0.2120	0.1725	-0.1761	-0.1181	0.0717	0.1396	0.4287	0.2768	0.2787	0.2539
785B08B:0I LSD/LAST 12MO	V5119	-0.0634	0.2034	0.1569	-0.1464	-0.1010	0.0595	0.1208	0.3498	0.2290	0.2292	0.2035
785B08C:0I LSD/LAST 30DA	V5120	-0.0392	0.1326	0.0947	-0.0788	-0.0568	0.0357	0.0586	0.2125	0.1327	0.1331	0.1102
PSYD COMPOSITE 1-11	B6121	-0.0668	0.2517	0.1981	-0.1820	-0.1264	0.0909	0.1421	0.4593	0.2963	0.2981	0.2690
PSYD COMPOSITE 1-14	B36	-0.0711	0.2663	0.2154	-0.2030	-0.1356	0.1001	0.1597	0.5196	0.3312	0.3332	0.3047
PSYD DICHOTOMY	B38	-0.0693	0.2575	0.2133	-0.2050	-0.1328	0.1001	0.1626	0.5306	0.3350	0.3370	0.3115
785B09A:0I PSYD/LIFETIME	V5121	-0.0578	0.2435	0.1907	-0.1856	-0.1196	0.0914	0.1393	0.4632	0.3008	0.3029	0.2732
785B09B:0I PSYD/LAST12MO	V5122	-0.0594	0.2188	0.1654	-0.1467	-0.1074	0.0751	0.1149	0.3680	0.2417	0.2431	0.2158
785B09C:0I PSYD/LAST30DA	V5123	-0.0436	0.1712	0.1028	-0.0846	-0.0716	0.0536	0.0638	0.2336	0.1546	0.1588	0.1299
CORE COMPOSITE 1-11	B6124	-0.0825	0.2668	0.1979	-0.1766	-0.1213	0.0974	0.1496	0.4798	0.2784	0.2773	0.2563
CORE COMPOSITE 1-14	B46	-0.0878	0.2780	0.2111	-0.1955	-0.1390	0.1036	0.1535	0.5371	0.3109	0.3100	0.2910
CORE DICHOTOMY	B62	-0.0853	0.2650	0.2058	-0.1968	-0.1402	0.1009	0.1838	0.5468	0.3157	0.3151	0.2994
785B10A:0I CORE/LIFETIME	V5124	-0.0787	0.2571	0.1902	-0.1704	-0.1182	0.0907	0.1435	0.4725	0.2775	0.2767	0.2553
785B10B:0I CORE/LAST12MO	V5125	-0.0735	0.2404	0.1751	-0.1485	-0.1005	0.0863	0.1362	0.4008	0.2356	0.2344	0.2128
785B10C:0I CORE/LAST30DA	V5126	-0.0584	0.1893	0.1229	-0.1006	-0.0595	0.0655	0.0993	0.2706	0.1587	0.1528	0.1351
ANPH COMPOSITE 1-11	B6127	0.0127	0.2798	0.2391	-0.1968	-0.1333	0.1253	0.1391	0.6381	0.3928	0.3912	0.3656
ANPH COMPOSITE 1-14	B56	0.0131	0.2904	0.2498	-0.2103	-0.1467	0.1353	0.1506	0.7189	0.4257	0.4251	0.4036
ANPH DICHOTOMY	B41	0.0122	0.2709	0.2388	-0.2033	-0.1468	0.1324	0.1478	0.7380	0.4188	0.4190	0.4052
785B11A:0I ANPH/LIFETIME	V5127	0.0065	0.2824	0.2364	-0.2096	-0.1450	0.1222	0.1498	0.6716	0.4112	0.4109	0.3855
785B11B:0I ANPH/LAST12MO	V5128	0.0093	0.2631	0.2258	-0.1815	-0.1215	0.1149	0.1259	0.5665	0.3578	0.3561	0.3292
785B11C:0I ANPH/LAST30DA	V5129	0.0155	0.2175	0.1785	-0.1351	-0.0880	0.0916	0.0910	0.4017	0.2672	0.2682	0.2398
QUAD COMPOSITE 1-11	B6130	-0.0478	0.2128	0.1597	-0.1266	-0.0785	0.0782	0.0978	0.3749	0.2488	0.2479	0.2191
QUAD COMPOSITE 1-14	B69	-0.0491	0.2206	0.1736	-0.1482	-0.0914	0.0880	0.1072	0.4304	0.2813	0.2810	0.2529
QUAD DICHOTOMY	B42	-0.0463	0.2080	0.1709	-0.1549	-0.0951	0.0892	0.1060	0.4432	0.2862	0.2868	0.2616

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NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SKOU:NDC.APPI3

CORRELATIONS

		V5150 785CC3 : R'S SEX	B6176 TRUANCY 10-65	V5198 785C25 : DX/AV HR GO OUT	B6169 RELIGOUS COMMITM ENT	V5179 785C20 : R HS GRA DE/D=1	B6192 $/WEEK T OT INCOM E 1-7	V5167 785C12 : R'POL BL P RADCL	V5052 785 : DRUGINDX (1=HOSE	R1 78 CIGAR PT COMPO SIT 1-8	R15 CIGARETT E CMP 1- 7	V5101 785B01 : PER SMK CIG,R'GL
785B12A:0X QUAD/LIFETIME	V5130	-0.0483	0.2020	0.1565	-0.1320	-0.0861	0.0753	0.0968	0.3830	0.2608	0.2606	0.2295
785B12B:0X QUAD/LAST12MO	V5131	-0.0423	0.1890	0.1355	-0.0998	-0.0628	0.0639	0.0836	0.3023	0.2043	0.2031	0.1757
785B12C:0X QUAD/LAST30DA	V5132	-0.0314	0.1472	0.0913	-0.0480	-0.0312	0.0485	0.0422	0.1922	0.1342	0.1329	0.1096
BRBT COMPOSITE 1-11	B6133	-0.0169	0.2181	0.1695	-0.1471	-0.1007	0.0727	0.1158	0.4846	0.2875	0.2892	0.2628
BRBT COMPOSITE 1-14	B76	-0.0189	0.2271	0.1791	-0.1690	-0.1133	0.0799	0.1304	0.5580	0.3231	0.3252	0.3000
BRBT DICHOTOMY	B83	-0.0189	0.2172	0.1706	-0.1729	-0.1142	0.0788	0.1318	0.5725	0.3250	0.3273	0.3062
785B13A:0X BRBT/LIFETIME	V5133	-0.0229	0.2142	0.1678	-0.1589	-0.1017	0.0746	0.1198	0.5050	0.3062	0.3091	0.2808
785B13B:0X BRBT/LAST12MO	V5134	-0.0140	0.1883	0.1476	-0.1185	-0.0818	0.0618	0.0931	0.3889	0.2371	0.2383	0.2122
785B13C:0X BRBT/LAST30DA	V5135	-0.0081	0.1462	0.1056	-0.0708	-0.0515	0.0477	0.0500	0.2507	0.1669	0.1667	0.1449
TRQL COMPOSITE 1-11	B6136	0.0084	0.2320	0.1669	-0.1458	-0.0963	0.0741	0.1121	0.5196	0.2690	0.2716	0.2480
TRQL COMPOSITE 1-14	B86	0.0140	0.2322	0.1697	-0.1612	-0.1001	0.0837	0.1197	0.5923	0.2898	0.2930	0.2722
TRQL DICHOTOMY	B51	0.0176	0.2107	0.1561	-0.1597	-0.0940	0.0844	0.1155	0.6011	0.2808	0.2843	0.2678
785B14A:0X TRQL/LIFETIME	V5136	0.0013	0.2250	0.1673	-0.1565	-0.0990	0.0801	0.1166	0.5371	0.2823	0.2861	0.2613
785B14B:0X TRQL/LAST12MO	V5137	0.0026	0.2114	0.1504	-0.1182	-0.0848	0.0586	0.0937	0.4100	0.2267	0.2285	0.2045
785B14C:0X TRQL/LAST30DA	V5138	0.0014	0.1848	0.1021	-0.0703	-0.0603	0.0435	0.0564	0.2517	0.1469	0.1478	0.1269
BRBOIB COMPOSITE 1-11	B6139	-0.0320	0.0885	0.0625	-0.0438	-0.0386	0.0335	0.0646	0.2310	0.1046	0.1070	0.0885
BRBOIB COMPOSITE 1-14	B96	-0.0337	0.0938	0.0783	-0.0516	-0.0491	0.0423	0.0640	0.2838	0.1250	0.1273	0.1073
BRBOIB DICHOTOMY	B52	-0.0314	0.0802	0.0836	-0.0527	-0.0530	0.0455	0.0561	0.2993	0.1292	0.1312	0.1121
785B15A:0X "B"/LIFETIME	V5139	-0.0370	0.0818	0.0655	-0.0447	-0.0384	0.0332	0.0563	0.2367	0.1046	0.1063	0.0870
785B15B:0X "B"/LAST 12MO	V5140	-0.0284	0.0607	0.0470	-0.0296	-0.0312	0.0266	0.0560	0.1713	0.0838	0.0859	0.0686
785B15C:0X "B"/LAST 30DA	V5141	-0.0335	0.0638	0.0227	-0.0134	-0.0226	0.0182	0.0397	0.1126	0.0468	0.0478	0.0366
BARC COMPOSITE 1-11	B6142	-0.0482	0.2081	0.1601	-0.1358	-0.1016	0.0538	0.1157	0.4117	0.2297	0.2312	0.2158
BARC COMPOSITE 1-14	B106	-0.0484	0.2188	0.1726	-0.1545	-0.1079	0.0638	0.1273	0.4704	0.2586	0.2605	0.2453
BARC DICHOTOMY	B53	-0.0442	0.2098	0.1685	-0.1575	-0.1038	0.0663	0.1268	0.4810	0.2616	0.2636	0.2504
785B16A:0X BARC/LIFETIME	V5142	-0.0526	0.1945	0.1552	-0.1388	-0.1021	0.0551	0.1101	0.4189	0.2341	0.2360	0.2203

CORRELATIONS

		V5150 785CC3 : #'S SEE	R6176 TRUANCY 10-65	V5194 785C25 : #I/AV WK GO OUT	R6169 RELIGOUS COMMITM ENT	V5179 785C20 : R HS GRA DE/D=1	R6192 $/WEEK T OT INCOM E 1-7	V5167 785C12 : R'POL BL F RADCL	V5052 785 : DRUGINDX (1=NONE	R1 78 CIGAR ETTE COMPO SIT 1-8	R15 CIGARTTE CMP 1-7	V5101 785B01 : PVP SMK CIG,REGL
785B16B:#I MARC/LAST12MO	V5103	-0.0438	0.1867	0.1359	-0.1102	-0.0892	0.0417	0.0963	0.3296	0.1878	0.1887	0.1728
785B16C:#I MARC/LAST30DA	V5104	-0.0285	0.1413	0.0914	-0.0623	-0.0690	0.0312	0.0609	0.2028	0.1184	0.1182	0.1091
INHL COMPOSITE 1-11	R6185	-0.0810	0.1737	0.1351	-0.1065	-0.0940	0.0561	0.0818	0.2808	0.1935	0.1965	0.1862
INHL COMPOSITE 1-10	R116	-0.0870	0.1858	0.1475	-0.1226	-0.1096	0.0678	0.0901	0.3373	0.2399	0.2437	0.2330
INHL DICHOTOMY	R61	-0.0821	0.1737	0.1408	-0.1215	-0.1171	0.0692	0.0865	0.3433	0.2489	0.2528	0.2430
785B17A:#I INHL/LIFETIME	V5105	-0.0806	0.1820	0.1379	-0.1181	-0.1003	0.0615	0.1001	0.3102	0.2298	0.2331	0.2166
785B17B:#I INHL/LAST12MO	V5106	-0.0626	0.1412	0.1050	-0.0757	-0.0521	0.0355	0.0648	0.1886	0.1235	0.1258	0.1162
785B17C:#I INHL/LAST30DA	V5107	-0.0498	0.1070	0.0724	-0.0520	-0.0288	0.0340	0.0276	0.1102	0.0639	0.0659	0.0599

CORRELATIONS

		V5102 785B02 : #CIGS SM KD/30DAY	R33 78 ALCOH CL COMPO SIT 1-11	R16 ALCOHOL CMP 1-21	V5108 785B04A: #I DRNK/ LIFETIME	V5105 785B04B: #I DRNK/ LAST12MO	V5106 785B04C: #I DRNK/ LAST30DA	R55 78 MARI COMPOSIT 1-11	R20 MARIJUAN A CMP 1-18	R23 MARIJUAN A DICH	R17 MARIJUAN A CMP 1-21	V5115 785B07A: #IMJ+HS/ LIFETIME
78 ALCOHOL COMPOSIT 1-11	R33	0.3662										
ALCOHOL CMP 1-21	R16	0.3591	0.9535									
785B04A:#I DRNK/LIFETIME	V5108	0.3375	0.8558	0.7187								
785B04B:#I DRNK/LAST12MO	V5105	0.3556	0.9749	0.8909	0.8795							
785B04C:#I DRNK/LAST30DA	V5106	0.3672	0.8783	0.8839	0.6988	0.8298						
78 MARI COMPOSIT 1-11	R55	0.4791	0.5936	0.5864	0.5282	0.5838	0.5578					
MARIJUANA CMP 1-18	R20	0.4860	0.6098	0.5881	0.5735	0.6049	0.5605	0.9737				
MARIJUANA DICH	R23	0.4052	0.5230	0.4622	0.5613	0.5326	0.4544	0.7229	0.8612			
MARIJUANA CMP 1-21	R17	0.4587	0.5501	0.5648	0.4615	0.5290	0.5283	0.9692	0.9077	0.5913		
785B07A:#IMJ+HS/LIFETIME	V5115	0.4791	0.5851	0.5550	0.5745	0.5876	0.5320	0.9088	0.9381	0.8181	0.8185	
785B07B:#IMJ+HS/LAST12MO	V5116	0.4612	0.5807	0.5684	0.5124	0.5780	0.5423	0.9816	0.9482	0.6865	0.9260	0.9186
785B07C:#IMJ+HS/LAST30DA	V5117	0.4431	0.5139	0.5262	0.4209	0.4886	0.5216	0.9234	0.8528	0.5269	0.9506	0.7715
LSD COMPOSITE 1-11	R6118	0.2803	0.2764	0.3054	0.2080	0.2501	0.2735	0.4508	0.4078	0.2318	0.4928	0.3618

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NOV 28, 1979 01:20 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SYNTAX:NDC.APP13

CORRELATIONS

		V5102 705B02 : #CIGS SMKD/30DAY	R33 78 ALCOHOL COMPOSIT 1-11	R16 ALCOHOL CMP 1-21	V5104 705B04A: #X DRNK/ LIFETIME	V5105 705B04B: #X DRNK/ LAST12MO	V5106 705B04C: #X DRNK/ LAST30DA	R55 78 MARI COMPOSIT 1-11	R20 MARIJUANA CMP 1-14	R23 MARIJUANA DICH	R17 MARIJUANA CMP 1-21	V5115 705B07A: #XMJ+HS/ LIFETIME
LSD COMPOSITE 1-14	R26	0.3090	0.2951	0.3208	0.2381	0.2721	0.2889	0.4926	0.4492	0.2638	0.5328	0.4094
LSD DICHOTOMY	R28	0.3115	0.2902	0.3112	0.2398	0.2715	0.2816	0.4934	0.4525	0.2724	0.5293	0.4212
705B08A:#X LSD/LIFETIME	V5118	0.2653	0.2606	0.2879	0.2033	0.2368	0.2558	0.4222	0.3843	0.2242	0.4609	0.3520
705B08B:#X LSD/LAST 12MO	V5119	0.2285	0.2354	0.2657	0.1649	0.2083	0.2372	0.3714	0.3325	0.1801	0.4116	0.2838
705B08C:#X LSD/LAST 30DA	V5120	0.1360	0.1452	0.1685	0.0918	0.1179	0.1565	0.2101	0.1887	0.1037	0.2339	0.1556
PSYD COMPOSITE 1-11	R#121	0.2852	0.3021	0.3331	0.2252	0.2746	0.3019	0.4854	0.4396	0.2509	0.5287	0.3914
PSYD COMPOSITE 1-14	R36	0.3186	0.3304	0.3576	0.2587	0.3058	0.3252	0.5366	0.4903	0.2909	0.5766	0.4507
PSYD DICHOTOMY	R38	0.3149	0.3280	0.3496	0.2672	0.3082	0.3189	0.5381	0.4953	0.3027	0.5719	0.4666
705B09A:#X PSYD/LIFETIME	V5121	0.2874	0.2896	0.3180	0.2247	0.2653	0.2857	0.4678	0.4258	0.2483	0.5098	0.3896
705B09B:#X PSYD/LAST12MO	V5122	0.2368	0.2535	0.2857	0.1773	0.2258	0.2587	0.4016	0.3593	0.1985	0.4447	0.3069
705B09C:#X PSYD/LAST30DA	V5123	0.1568	0.1634	0.1898	0.1056	0.1342	0.1775	0.2570	0.2283	0.1195	0.2906	0.1848
CORE COMPOSITE 1-11	R#124	0.2681	0.3066	0.3351	0.2316	0.2793	0.3083	0.4788	0.4377	0.2602	0.5116	0.4001
CORE COMPOSITE 1-14	R46	0.2956	0.3271	0.3511	0.2598	0.3021	0.3301	0.5251	0.4849	0.3001	0.5531	0.4585
CORE DICHOTOMY	R#2	0.2967	0.3189	0.3364	0.2639	0.2984	0.3229	0.5249	0.4890	0.3129	0.5460	0.4684
705B10A:#X CORE/LIFETIME	V5124	0.2650	0.2882	0.3150	0.2233	0.2621	0.2892	0.4558	0.4177	0.2507	0.4876	0.3870
705B10B:#X CORE/LAST12MO	V5125	0.2303	0.2703	0.3006	0.1938	0.2429	0.2714	0.4109	0.3713	0.2103	0.4457	0.3298
705B10C:#X CORE/LAST30DA	V5126	0.1553	0.1918	0.2195	0.1272	0.1601	0.2029	0.2787	0.2499	0.1368	0.3082	0.2139
AMPH COMPOSITE 1-11	R#127	0.3791	0.3646	0.3864	0.2916	0.3417	0.3620	0.5569	0.5186	0.3313	0.5769	0.4857
AMPH COMPOSITE 1-14	R56	0.4031	0.3839	0.3978	0.3249	0.3654	0.3751	0.5963	0.5627	0.3770	0.6073	0.5015
AMPH DICHOTOMY	R41	0.3873	0.3644	0.3670	0.3296	0.3536	0.3490	0.5781	0.5581	0.3915	0.5766	0.5099
705B11A:#X AMPH/LIFETIME	V5127	0.3930	0.3662	0.3867	0.3035	0.3450	0.3600	0.5655	0.5288	0.3429	0.5861	0.5092
705B11B:#X AMPH/LAST12MO	V5128	0.3504	0.3411	0.3665	0.2617	0.3169	0.3419	0.5169	0.4761	0.2918	0.5421	0.4361
705B11C:#X AMPH/LAST30DA	V5129	0.2704	0.2531	0.2816	0.1792	0.2226	0.2742	0.3730	0.3416	0.2045	0.3967	0.3045
QUAD COMPOSITE 1-11	R#130	0.2458	0.2411	0.2652	0.1800	0.2177	0.2458	0.3723	0.3384	0.1963	0.4007	0.3039
QUAD COMPOSITE 1-14	R69	0.2727	0.2624	0.2842	0.2059	0.2417	0.2651	0.4158	0.3797	0.2277	0.4415	0.3503

CORRELATIONS

		V5102 785B02 : #CIGS SM KO/30DAY	R33 78 ALCOH CL COMPO SIT 1-11	R16 ALCOHOL CMP 1-21	V5104 785B04A: #X DRNK/ LIFETIME	V5105 785B04B: #X DRNK/ LAST12MO	V5106 785B04C: #X DRNK/ LAST30DA	R55 78 MARI COMPOSIT 1-11	R20 MARIJUAN A CMP 1-14	R23 MARIJUAN A DICH	R17 MARIJUAN A CMP 1-21	V5115 785B07A: #XMJ+HS/ LIFETIME
QUAD DICHOTOMY	R42	0.2731	0.2590	0.2766	0.2117	0.2428	0.2597	0.4109	0.3885	0.2366	0.4404	0.3626
785B12A:#X QUAD/LIFETIME	V5130	0.2573	0.2337	0.2578	0.1799	0.2114	0.2381	0.3615	0.3301	0.1953	0.3895	0.3046
785B12B:#X QUAD/LAST12MO	V5131	0.2060	0.2036	0.2277	0.1837	0.1801	0.2117	0.3061	0.2756	0.1538	0.3333	0.2392
785B12C:#X QUAD/LAST30DA	V5132	0.1393	0.1441	0.1678	0.0904	0.1156	0.1588	0.2003	0.1787	0.0955	0.2229	0.1482
BRBT COMPOSITE 1-11	R6133	0.2779	0.2699	0.2928	0.2013	0.2448	0.2720	0.3992	0.3706	0.2340	0.4180	0.3460
BRBT COMPOSITE 1-14	R76	0.3073	0.2886	0.3068	0.2384	0.2678	0.2887	0.4010	0.4142	0.2731	0.4565	0.3973
BRBT DICHOTOMY	R43	0.3048	0.2776	0.2887	0.2424	0.2623	0.2757	0.4370	0.4146	0.2833	0.4479	0.4069
785B13A:#X BRBT/LIFETIME	V5133	0.2929	0.2711	0.2926	0.2197	0.2478	0.2684	0.4071	0.3798	0.2442	0.4275	0.3676
785B13B:#X BRBT/LAST12MO	V5134	0.2332	0.2351	0.2604	0.1706	0.2087	0.2402	0.3378	0.3094	0.1853	0.3583	0.2793
785B13C:#X BRBT/LAST30DA	V5135	0.1700	0.1582	0.1811	0.1052	0.1335	0.1696	0.2184	0.1991	0.1170	0.2326	0.1904
TRQL COMPOSITE 1-11	R6136	0.2556	0.2662	0.2826	0.2137	0.2449	0.2600	0.3744	0.3480	0.2208	0.3902	0.3270
TRQL COMPOSITE 1-14	R86	0.2700	0.2777	0.2872	0.2373	0.2611	0.2658	0.3940	0.3708	0.2461	0.4050	0.3581
TRQL DICHOTOMY	R51	0.2572	0.2612	0.2637	0.2356	0.2505	0.2454	0.3739	0.3558	0.2454	0.3796	0.3519
785B14A:#X TRQL/LIFETIME	V5136	0.2650	0.2644	0.2812	0.2203	0.2439	0.2543	0.3767	0.3525	0.2292	0.3932	0.3425
785B14B:#X TRQL/LAST12MO	V5137	0.2203	0.2311	0.2520	0.1731	0.2080	0.2318	0.3232	0.2963	0.1782	0.3817	0.2697
785B14C:#X TRQL/LAST30DA	V5138	0.1476	0.1416	0.1581	0.1021	0.1224	0.1516	0.2025	0.1841	0.1069	0.2187	0.1650
HEROIN COMPOSITE 1-11	R6139	0.0994	0.0994	0.1143	0.0669	0.0778	0.1049	0.1349	0.1246	0.0770	0.1412	0.1167
HEROIN COMPOSITE 1-14	R96	0.1198	0.1093	0.1233	0.0813	0.0887	0.1171	0.1638	0.1521	0.0961	0.1719	0.1446
HEROIN DICHOTOMY	R52	0.1244	0.1058	0.1175	0.0847	0.0887	0.1149	0.1709	0.1593	0.1022	0.1796	0.1530
785B15A:#X "H"/LIFETIME	V5139	0.1017	0.0968	0.1122	0.0649	0.0739	0.1011	0.1286	0.1195	0.0757	0.1348	0.1157
785B15B:#X "H"/LAST 12MO	V5140	0.0811	0.0838	0.0982	0.0689	0.0619	0.0887	0.0987	0.0902	0.0537	0.1029	0.0822
785B15C:#X "H"/LAST 30DA	V5141	0.0449	0.0478	0.0589	0.0249	0.0292	0.0507	0.0581	0.0527	0.0301	0.0622	0.0440
NARC COMPOSITE 1-11	R6142	0.2179	0.2395	0.2627	0.1799	0.2164	0.2358	0.3644	0.3340	0.2008	0.3905	0.3013
NARC COMPOSITE 1-14	R106	0.2418	0.2597	0.2802	0.2061	0.2372	0.2556	0.4031	0.3727	0.2322	0.4268	0.3439
NARC DICHOTOMY	R53	0.2417	0.2547	0.2710	0.2113	0.2356	0.2506	0.4016	0.3740	0.2395	0.4211	0.3514

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NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SR40:NDC.APPEJ

CORRELATIONS

		V5102 785B02 : #CIGS SM KD/30DAY	B33 78 ALCOH CL COMPOSIT 1-11	B16 ALCOHOL CMP 1-21	V5104 785B04A: #X DRNK/ LIFETIME	V5105 785B04B: #X DRNK/ LAST12MO	V5106 785B04C: #X DRNK/ LAST30DA	B55 78 MARI COMPOSIT 1-11	B20 MARIJUAN A CMP 1-14	B23 MARIJUAN A DICH	B17 MARIJUAN A CMP 1-21	V5115 785B07A: #MRJ+HS/ LIFETIME
785B16A:#X DABC/LIFETIME	V5142	0.2217	0.2331	0.2558	0.1802	0.2100	0.2290	0.3520	0.3243	0.1992	0.1776	0.3002
785B16B:#X DABC/LAST12MO	V5143	0.1824	0.2015	0.2250	0.1428	0.1796	0.1995	0.2999	0.2719	0.1563	0.3255	0.2388
785B16C:#X DABC/LAST30DA	V5144	0.1160	0.1336	0.1522	0.0872	0.1112	0.1414	0.1901	0.1713	0.0960	0.2101	0.1458
IBBL COMPOSITE 1-11	B6145	0.1815	0.2120	0.2275	0.1652	0.1931	0.2120	0.2736	0.2607	0.1809	0.2791	0.2466
IBBL COMPOSITE 1-14	B116	0.2203	0.2389	0.2500	0.2021	0.2236	0.2368	0.3167	0.3072	0.2257	0.3179	0.2948
IBBL DICHOTOMY	B61	0.2259	0.2331	0.2397	0.2080	0.2224	0.2291	0.3149	0.3090	0.2350	0.3127	0.3059
785B17A:#X IBBL/LIFETIME	V5145	0.2148	0.2221	0.2419	0.1799	0.2011	0.2253	0.2881	0.2754	0.1930	0.2968	0.2682
785B17B:#X IBBL/LAST12MO	V5146	0.1226	0.1568	0.1734	0.1067	0.1375	0.1604	0.1946	0.1799	0.1119	0.2035	0.1618
785B17C:#X IBBL/LAST30DA	V5147	0.0628	0.0891	0.1013	0.0552	0.0730	0.0923	0.1122	0.1030	0.0624	0.1206	0.0881

CORRELATIONS

		V5116 785B07B: #MRJ+HS/ LAST12MO	V5117 785B07C: #MRJ+HS/ LAST30DA	B6118 LSD COMP OSITE 1-11	B26 LSD COMP OSITE 1-14	B28 LSD DICH OTOMY	V5118 785B08A: #X LSD/L IFETIME	V5119 785B08B: #X LSD/L AST 12MO	V5120 785B08C: #X LSD/L AST 30DA	B6121 PSYD COM POSITE 1 -11	B36 PSYD COM POSITE 1 -14	B38 PSYD DIC HOTOMY
785B07C:#MRJ+HS/LAST30DA	V5117	0.8882										
LSD COMPOSITE 1-11	B6118	0.8115	0.8742									
LSD COMPOSITE 1-14	B26	0.8533	0.9104	0.9550								
LSD DICHOTOMY	B28	0.8569	0.9052	0.8507	0.9284							
785B08A:#X LSD/LIFETIME	V5118	0.3846	0.4388	0.9035	0.8919	0.8201						
785B08B:#X LSD/LAST 12MO	V5119	0.3355	0.3991	0.9551	0.8264	0.6602	0.8374					
785B08C:#X LSD/LAST 30DA	V5120	0.1843	0.2355	0.6595	0.5311	0.3861	0.5669	0.7157				
PSYD COMPOSITE 1-11	B6121	0.8852	0.9035	0.6469	0.6385	0.5800	0.4252	0.4018	0.4125			
PSYD COMPOSITE 1-14	B36	0.8978	0.9482	0.6382	0.6583	0.6295	0.4341	0.5622	0.3618	0.9513		
PSYD DICHOTOMY	B38	0.8039	0.8429	0.5778	0.6258	0.6219	0.3900	0.4805	0.2866	0.8288	0.9610	
785B09A:#X PSYD/LIFETIME	V5121	0.8270	0.8832	0.6337	0.6027	0.6055	0.6888	0.5689	0.3924	0.9088	0.8995	0.9166
785B09B:#X PSYD/LAST12MO	V5122	0.3631	0.4253	0.6022	0.5614	0.4881	0.5659	0.5902	0.4203	0.9587	0.8292	0.6808

CORRELATIONS

		V5116 785B07B: %(MJ+BS/ LAST12MO	V5117 785B07C: %(BJ+BS/ LAST30DA	R6118 LSD COMP OSITE 1-11	R26 LSD COMP OSITE 1-14	R28 LSD DICH OTOMY	V5118 785B08A: %(LSD/L IFETIME	V5119 785B08B: %(LSD/L AST 12MO	V5120 785B08C: %(LSD/L AST 30DA	R6121 PSYD COM POSITE 1-11	R36 PSYD COM POSITE 1-14	R38 PSYD DIC HOTOMY
785B09C:%(PSYD/LAST30DA	V5123	0.2235	0.2848	0.4440	0.3948	0.3258	0.4082	0.4495	0.4457	0.6948	0.5621	0.3965
CORE COMPOSITE 1-11	R6124	0.4476	0.4959	0.5453	0.5529	0.5211	0.5383	0.4898	0.3318	0.5428	0.5508	0.5128
CORE COMPOSITE 1-14	R46	0.4949	0.5383	0.5406	0.5669	0.5498	0.5407	0.4[illegible]	0.3049	0.5426	0.5709	0.5493
CORE DICHOTOMY	R62	0.4984	0.5333	0.4897	0.5318	0.5302	0.4966	0.4049	0.2534	0.4962	0.5415	0.5375
785B10A:%(CORE/LIFETIME	V5124	0.4286	0.4714	0.5030	0.5605	0.5364	0.5699	0.4776	0.3278	0.5309	0.5865	0.5157
785B10B:%(CORE/LAST12MO	V5125	0.3809	0.4307	0.5143	0.5072	0.4663	0.5016	0.4757	0.3271	0.5075	0.4995	0.4516
785B10C:%(CORE/LAST30DA	V5126	0.2511	0.3050	0.3657	0.3478	0.3082	0.3512	0.3517	0.3096	0.3672	0.3869	0.3005
AMPH COMPOSITE 1-11	R6127	0.5293	0.5560	0.5298	0.5530	0.5346	0.4964	0.4602	0.2671	0.5531	0.5716	0.5410
AMPH COMPOSITE 1-14	R56	0.5712	0.5844	0.5168	0.5557	0.5502	0.4924	0.4323	0.2474	0.5376	0.5765	0.5638
AMPH DICHOTOMY	R61	0.5591	0.5539	0.4823	0.4963	0.5075	0.4318	0.3887	0.1950	0.4577	0.5175	0.5284
785B11A:%(AMPH/LIFETIME	V5127	0.5361	0.5611	0.5486	0.5928	0.5890	0.5534	0.4563	0.2389	0.5658	0.6066	0.5930
785B11B:%(AMPH/LAST12MO	V5128	0.4889	0.5234	0.5211	0.5348	0.5096	0.4823	0.4619	0.2676	0.5484	0.5513	0.5120
785B11C:%(AMPH/LAST30DA	V5129	0.3862	0.3948	0.4093	0.4011	0.3668	0.3679	0.3819	0.2728	0.4377	0.4223	0.3737
QUAD COMPOSITE 1-11	R6130	0.3687	0.3856	0.4571	0.4530	0.4188	0.4420	0.4184	0.2925	0.5168	0.5004	0.4850
QUAD COMPOSITE 1-14	R69	0.3863	0.4243	0.4784	0.4930	0.4716	0.4773	0.4195	0.2831	0.5293	0.5384	0.5024
QUAD DICHOTOMY	R42	0.3909	0.4228	0.4558	0.4865	0.4789	0.4678	0.3832	0.2494	0.4943	0.5260	0.5111
785B12A:%(QUAD/LIFETIME	V5130	0.3326	0.3747	0.4622	0.4711	0.4462	0.4880	0.4110	0.2917	0.5150	0.5120	0.4672
785B12B:%(QUAD/LAST12MO	V5131	0.2816	0.3223	0.4038	0.3838	0.3809	0.3776	0.3868	0.2756	0.4649	0.4283	0.3606
785B12C:%(QUAD/LAST30DA	V5132	0.1772	0.2201	0.2897	0.2606	0.2186	0.2596	0.2895	0.2927	0.3552	0.3099	0.2441
BRBT COMPOSITE 1-11	R6133	0.3739	0.4052	0.4875	0.4910	0.4608	0.4657	0.4396	0.3063	0.5322	0.5209	0.4687
BRBT COMPOSITE 1-14	R76	0.4150	0.4406	0.4979	0.5234	0.5089	0.4888	0.4275	0.2779	0.5284	0.5433	0.5126
BRBT DICHOTOMY	R43	0.4130	0.4306	0.4581	0.5021	0.5043	0.4621	0.3731	0.2230	0.4719	0.5105	0.5034
785B13A:%(BRBT/LIFETIME	V5133	0.3794	0.4105	0.4950	0.5190	0.5038	0.5192	0.4266	0.2807	0.5356	0.5442	0.5078
785B13B:%(BRBT/LAST12MO	V5134	0.3146	0.3499	0.4400	0.4265	0.3861	0.4083	0.4189	0.2952	0.4923	0.4623	0.3983
785B13C:%(BRBT/LAST30DA	V5135	0.2009	0.2349	0.3120	0.2901	0.2521	0.2892	0.3042	0.2998	0.3678	0.3281	0.2664

CORRELATIONS

		V5116 785B07B: %INJ+NS/ LAST12MO	V5117 785B07C: %INJ+NS/ LAST30DA	B6118 LSD COMP OSITE 1-11	B26 LSD COMP OSITE 1-14	B28 LSD DICH OTOMY	V5118 785B08A: %X LSD/L IFETIME	V5119 785B08B: %X LSD/L AST 12MO	V5120 785B08C: %X LSD/L AST 30DA	B6121 PSYD COM POSITE 1-11	B36 PSYD COM POSITE 1-14	B38 PSYD DIC HOTOMY
TRQL COMPOSITE 1-11	B6136	0.3533	0.3745	0.4272	0.4313	0.4052	0.4077	0.3887	0.2502	0.4672	0.4615	0.4189
TRQL COMPOSITE 1-14	B86	0.3739	0.3873	0.4169	0.4382	0.4268	0.4081	0.3583	0.2240	0.4852	0.4618	0.4191
TRQL DICHOTOMY	B51	0.3566	0.3619	0.3682	0.4028	0.4041	0.3697	0.3007	0.1798	0.3833	0.4184	0.4156
785B14A:%X TRQL/LIFETIME	V5136	0.3535	0.3737	0.4023	0.4236	0.4097	0.4618	0.3814	0.2888	0.4734	0.4824	0.4512
785B14B:%X TRQL/LAST12MO	V5137	0.3033	0.3301	0.3985	0.3861	0.3895	0.3708	0.3774	0.2536	0.4422	0.4177	0.3622
785B14C:%X TRQL/LAST30DA	V5138	0.1840	0.2171	0.2556	0.2444	0.2183	0.2337	0.2433	0.2007	0.3258	0.2938	0.2819
HEROIN COMPOSITE 1-11	B6139	0.1272	0.1455	0.3075	0.2615	0.2053	0.2782	0.3173	0.3045	0.2625	0.2388	0.1983
HEROIN COMPOSITE 1-14	B96	0.1521	0.1757	0.3340	0.3025	0.2557	0.3247	0.3308	0.3003	0.2952	0.2782	0.2404
HEROIN DICHOTOMY	B52	0.1570	0.1826	0.3218	0.3062	0.2726	0.3308	0.3073	0.2738	0.2920	0.2826	0.2512
785B15A:%X "H"/LIFETIME	V5139	0.1202	0.1378	0.3035	0.2601	0.2042	0.2949	0.3139	0.2990	0.2591	0.2353	0.1950
785B15B:%X "H"/LAST 12MO	V5140	0.0952	0.1100	0.2694	0.2122	0.1501	0.2251	0.2992	0.2859	0.2204	0.1890	0.1458
785B15C:%X "H"/LAST 30DA	V5141	0.0533	0.0662	0.1611	0.1089	0.0749	0.1115	0.1486	0.1818	0.1182	0.1031	0.0813
BARC COMPOSITE 1-11	B6142	0.3358	0.3729	0.4384	0.4339	0.4009	0.4278	0.4021	0.2518	0.4989	0.4850	0.4367
BARC COMPOSITE 1-14	B106	0.3744	0.4079	0.4529	0.4674	0.4479	0.4540	0.3960	0.2432	0.4997	0.5140	0.4847
BARC DICHOTOMY	B53	0.3755	0.4027	0.4253	0.4556	0.4500	0.4368	0.3548	0.2136	0.4593	0.4981	0.4847
785B16A:%X BARC/LIFETIME	V5142	0.3226	0.3598	0.4381	0.4483	0.4260	0.4623	0.3869	0.2892	0.4902	0.4884	0.4471
785B16B:%X BARC/LAST12MO	V5143	0.2743	0.3112	0.3948	0.3721	0.3277	0.3731	0.3823	0.2512	0.4526	0.4219	0.3604
785B16C:%X BARC/LAST30DA	V5144	0.1692	0.2067	0.2413	0.2268	0.1995	0.2262	0.2332	0.1867	0.2896	0.2555	0.2045
IBRL COMPOSITE 1-11	B6145	0.2590	0.2726	0.2703	0.2735	0.2576	0.2844	0.2824	0.1890	0.2627	0.2716	0.2572
IBRL COMPOSITE 1-14	B116	0.3010	0.3080	0.2910	0.3040	0.2939	0.2793	0.2510	0.1505	0.2818	0.3015	0.2944
IBRL DICHOTOMY	B61	0.3001	0.3013	0.2789	0.2938	0.2894	0.2752	0.2302	0.1351	0.2648	0.2913	0.2905
785B17A:%X IBRL/LIFETIME	V5145	0.2700	0.2911	0.3322	0.3408	0.3245	0.3365	0.2931	0.1920	0.3006	0.3177	0.3066
785B17B:%X IBRL/LAST12MO	V5146	0.1830	0.2028	0.2097	0.2023	0.1824	0.1713	0.2039	0.1281	0.2097	0.2055	0.1850
785B17C:%X IBRL/LAST30DA	V5147	0.1019	0.1226	0.1151	0.1144	0.1058	0.0951	0.1055	0.0612	0.1063	0.1115	0.1069

CORRELATIONS

		V5121 785B09A: #X PSYD/ LIFETIME	V5122 785B09B: #X PSYD/ LAST12MO	V5123 785B09C: #X PSYD/ LAST30DA	R6124 COKE COM POSITE 1 -11	R46 COKE COM POSITE 1 -14	R62 COKE DIC HOTOMY	V5124 785B10A: #X COKE/ LIFETIME	V5125 785B10B: #X COKE/ LAST12MO	V5126 785B10C: #X COKE/ LAST30DA	R6127 AMPH COM POSITE 1 -11	R56 AMPH COM POSITE 1 -14
785B09B:#X PSYD/LAST12MO	V5122	0.8436										
785B09C:#X PSYD/LAST30DA	V5123	0.6032	0.7417									
COKE COMPOSITE 1-11	R6124	0.5317	0.4892	0.3596								
COKE COMPOSITE 1-14	R46	0.5416	0.4712	0.3294	0.9584							
COKE DICHOTOMY	R62	0.5050	0.4137	0.2722	0.8290	0.9581						
785B10A:#X COKE/LIFETIME	V5124	0.5515	0.4722	0.3488	0.9397	0.9060	0.7962					
785B10B:#X COKE/LAST12MO	V5125	0.4890	0.4730	0.3559	0.9662	0.8514	0.6681	0.9086				
785B10C:#X COKE/LAST30DA	V5126	0.3482	0.3525	0.3458	0.7522	0.6202	0.4404	0.6923	0.7906			
AMPH COMPOSITE 1-11	R6127	0.5300	0.4910	0.3360	0.5213	0.5188	0.5094	0.5029	0.4735	0.3216		
AMPH COMPOSITE 1-14	R56	0.5254	0.4583	0.3035	0.5106	0.5480	0.5298	0.4965	0.4504	0.3019	0.9598	
AMPH DICHOTOMY	R61	0.4603	0.3658	0.2287	0.4397	0.4891	0.4988	0.4326	0.3708	0.2433	0.8018	0.9371
785B11A:#X AMPH/LIFETIME	V5127	0.5048	0.4831	0.3188	0.5260	0.5588	0.5023	0.5363	0.4653	0.3053	0.9252	0.9264
785B11B:#X AMPH/LAST12MO	V5128	0.5143	0.4947	0.3414	0.5102	0.5187	0.4823	0.4909	0.4719	0.3172	0.9791	0.8938
785B11C:#X AMPH/LAST30DA	V5129	0.4043	0.4153	0.3459	0.3940	0.3899	0.3528	0.3759	0.3715	0.2927	0.7983	0.6871
QUAD COMPOSITE 1-11	R6130	0.5013	0.4868	0.4011	0.5219	0.5029	0.4815	0.5191	0.5022	0.3966	0.4911	0.4655
QUAD COMPOSITE 1-14	R69	0.5335	0.4761	0.3686	0.5338	0.5333	0.4875	0.5379	0.4983	0.3760	0.5172	0.5082
QUAD DICHOTOMY	R42	0.5160	0.4239	0.3057	0.4971	0.5145	0.4871	0.5079	0.4508	0.3237	0.4958	0.5030
785B12A:#X QUAD/LIFETIME	V5130	0.5047	0.4756	0.3816	0.5142	0.5035	0.4499	0.5382	0.4895	0.3713	0.4801	0.4631
785B12B:#X QUAD/LAST12MO	V5131	0.4348	0.4601	0.3944	0.4701	0.4365	0.3669	0.4611	0.4663	0.3798	0.4296	0.3914
785B12C:#X QUAD/LAST30DA	V5132	0.3207	0.3634	0.4017	0.3481	0.3099	0.2467	0.3325	0.3511	0.3615	0.2981	0.2618
BRET COMPOSITE 1-11	R6133	0.5159	0.4965	0.3793	0.4561	0.4656	0.4352	0.4502	0.4181	0.2856	0.5867	0.5667
BRET COMPOSITE 1-14	R76	0.5263	0.4696	0.3376	0.4636	0.4899	0.4734	0.4640	0.4109	0.2720	0.5992	0.6059
BRET DICHOTOMY	R43	0.4836	0.3969	0.2639	0.4246	0.4643	0.4628	0.4309	0.3632	0.2119	0.5514	0.5931
785B13A:#X BRET/LIFETIME	V5133	0.5668	0.4829	0.3544	0.4616	0.4822	0.4610	0.4815	0.4140	0.2798	0.5790	0.5728
785B13B:#X BRET/LAST12MO	V5134	0.4648	0.4795	0.3842	0.4116	0.4007	0.3711	0.4017	0.3909	0.2742	0.5325	0.4928

791128 004285 NDC

NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SK40:NDC.APP13

CORRELATIONS

		V5121 785BC9A: 0% FSYD/ LIFETIME	V5122 785B09B: 0% PSYD/ LAST12MO	V5123 785B09C: 0% PSYD/ LAST30DA	B6124 COKE CON POSITE 1 -11	B46 COKE CON POSITE 1 -14	B62 COKE DIC HOTOMY	V5124 785B10A: 0% COKE/ LIFETIME	V5125 785B10B: 0% COKE/ LAST12MO	V5126 785B10C: 0% COKE/ LAST30DA	B6127 AMPH CON POSITE 1 -11	B56 AMPH CON POSITE 1 -14
785B13C:0% DRBY/LAST30DA	V5135	0.3450	0.3707	0.3637	0.3027	0.2935	0.2598	0.2965	0.2802	0.2404	0.3755	0.3151
TRQL COMPOSITE 1-11	B6136	0.4436	0.4317	0.3296	0.4167	0.4182	0.3839	0.4127	0.3879	0.2750	0.5092	0.4982
TRQL COMPOSITE 1-14	B86	0.4382	0.3915	0.2797	0.4032	0.4178	0.3961	0.4026	0.3685	0.2581	0.5018	0.5129
TRQL DICHOTOMY	B51	0.3918	0.3184	0.2087	0.3530	0.3779	0.3695	0.3555	0.3090	0.2114	0.4877	0.4776
785B14A:0% TRQL/LIFETIME	V5136	0.4944	0.4241	0.3119	0.4200	0.4304	0.4035	0.4383	0.3832	0.2681	0.5051	0.5052
785B14B:0% TRQL/LAST12MO	V5137	0.4051	0.4268	0.3423	0.3894	0.3802	0.3389	0.3809	0.3711	0.2672	0.4704	0.4810
785B14C:0% TRQL/LAST30DA	V5138	0.2891	0.3282	0.3274	0.2802	0.2657	0.2291	0.2805	0.2763	0.2374	0.3218	0.2926
HEROIN COMPOSITE 1-11	B6139	0.2476	0.2612	0.2175	0.2945	0.2624	0.2093	0.2907	0.2871	0.2615	0.1990	0.1884
HEROIN COMPOSITE 1-14	B96	0.2946	0.2853	0.2360	0.3206	0.3007	0.2561	0.3318	0.3022	0.2661	0.2270	0.2169
HEROIN DICHOTOMY	B52	0.3039	0.2757	0.2267	0.3099	0.3027	0.2699	0.3329	0.2839	0.2826	0.2266	0.2218
785B15A:0% "H"/LIFETIME	V5139	0.2592	0.2570	0.2076	0.2873	0.2577	0.2075	0.3006	0.2807	0.2546	0.1983	0.1809
785B15B:0% "H"/LAST 12MO	V5140	0.1918	0.2332	0.1908	0.2513	0.2101	0.1528	0.2352	0.2540	0.2369	0.1681	0.1489
785B15C:0% "H"/LAST 30DA	V5141	0.0981	0.1188	0.1471	0.1711	0.1356	0.0901	0.1894	0.1784	0.2272	0.0880	0.0771
NARC COMPOSITE 1-11	B6142	0.4731	0.4607	0.3308	0.4549	0.4524	0.4118	0.4469	0.4245	0.3095	0.4684	0.4508
NARC COMPOSITE 1-14	B106	0.4947	0.4832	0.3082	0.4636	0.4786	0.4523	0.4650	0.4184	0.2958	0.4853	0.4882
NARC DICHOTOMY	B53	0.4697	0.3876	0.2600	0.4303	0.4597	0.4486	0.4401	0.3757	0.2572	0.4567	0.4706
785B16A:0% NARC/LIFETIME	V5142	0.5082	0.4490	0.3186	0.4698	0.4506	0.4132	0.4659	0.4167	0.2997	0.4583	0.4473
785B16B:0% NARC/LAST12MO	V5143	0.4178	0.4427	0.3228	0.4119	0.3940	0.3437	0.3958	0.3970	0.2961	0.4198	0.3886
785B16C:0% NARC/LAST30DA	V5144	0.2589	0.2948	0.2748	0.2725	0.2528	0.2128	0.2633	0.2693	0.2576	0.2679	0.2412
INHL COMPOSITE 1-11	B6145	0.2435	0.2312	0.1716	0.2413	0.2556	0.2471	0.2381	0.2116	0.1[illegible]1	0.3076	0.3072
INHL COMPOSITE 1-14	B116	0.2719	0.2378	0.1604	0.2685	0.2893	0.2879	0.2633	0.2258	0.[illegible]87	[illegible]866	0.3491
INHL DICHOTOMY	B61	0.2637	0.2167	0.1351	0.2533	0.2834	0.2876	0.2568	0.2120	0.1[illegible]5	[illegible]2	0.3431
785B17A:0% INHL/LIFETIME	V5145	0.3050	0.2578	0.1762	0.2871	0.3041	0.2941	0.2958	0.2581	0.1[illegible]83	[illegible]33	0.3339
785B17B:0% INHL/LAST12MO	V5146	0.1804	0.1985	0.1599	0.1825	0.1836	0.1688	0.1712	0.1675	0.1188	0.2313	0.2211
785B17C:0% INHL/LAST30DA	V5147	0.0970	0.0929	0.0879	0.1067	0.1081	0.1007	0.0972	0.0959	0.0982	0.1840	0.1324

791128 C04285 NDC

NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SNAU:NDC.APPI3

CORRELATIONS

		R41 AMPH DICHOTOMY	V5127 785B11A: 0X AMPH/ LIFETIME	V5128 785B11B: 0X AMPH/ LAST12MO	V5129 785B11C: 0X AMPH/ LAST30DA	R6130 QUAD COMPOSITE 1-11	R69 QUAD COMPOSITE 1-18	R42 QUAD DICHOTOMY	V5130 785B12A: 0X QUAD/ LIFETIME	V5131 785B12B: 0X QUAD/ LAST12MO	V5132 785B12C: 0X QUAD/ LAST30DA	R6133 BRBT COMPOSITE 1-11
785B11A:0X AMPH/LIFETIME	V5127	0.8233										
785B11B:0X AMPH/LAST12MO	V5128	0.6867	0.8948									
785B11C:0X AMPH/LAST30DA	V5129	0.4761	0.6810	0.8005								
QUAD COMPOSITE 1-11	R6130	0.3812	0.4924	0.4859	0.4101							
QUAD COMPOSITE 1-18	R69	0.4397	0.5407	0.5033	0.4077	0.9498						
QUAD DICHOTOMY	R42	0.4552	0.5379	0.4752	0.3695	0.8158	0.9555					
785B12A:0X QUAD/LIFETIME	V5130	0.3895	0.5177	0.4704	0.3871	0.9159	0.9073	0.8160				
785B12B:0X QUAD/LAST12MO	V5131	0.2997	0.4109	0.4324	0.3814	0.9617	0.8341	0.6373	0.8576			
785B12C:0X QUAD/LAST30DA	V5132	0.1872	0.2701	0.2979	0.3305	0.7122	0.5762	0.3952	0.5982	0.7440		
BRBT COMPOSITE 1-11	R6133	0.4788	0.5822	0.5732	0.4836	0.5655	0.5509	0.4866	0.5557	0.5359	0.3878	
BRBT COMPOSITE 1-18	R76	0.5463	0.6211	0.5713	0.4588	0.5252	0.5460	0.5153	0.5338	0.4689	0.3234	0.9869
BRBT DICHOTOMY	R43	0.5570	0.5965	0.5124	0.3891	0.4338	0.4864	0.4912	0.4593	0.3576	0.2293	0.8012
785B13A:0X BRBT/LIFETIME	V5133	0.5000	0.6280	0.5601	0.4526	0.5466	0.5616	0.5241	0.6032	0.4943	0.3397	0.9077
785B13B:0X BRBT/LAST12MO	V5134	0.3884	0.5071	0.5326	0.4631	0.5531	0.5135	0.4291	0.5393	0.5480	0.4047	0.9618
785B13C:0X BRBT/LAST30DA	V5135	0.2475	0.3433	0.3749	0.4132	0.4397	0.3857	0.2995	0.4050	0.4439	0.4634	0.7229
TRQL COMPOSITE 1-11	R6136	0.4286	0.5041	0.4956	0.3997	0.4998	0.4884	0.4827	0.4855	0.4591	0.3193	0.6346
TRQL COMPOSITE 1-18	R86	0.4691	0.5164	0.4751	0.3708	0.4430	0.4683	0.4893	0.4585	0.3922	0.2628	0.5781
TRQL DICHOTOMY	R51	0.4609	0.4786	0.4118	0.3099	0.3591	0.4057	0.4125	0.3835	0.2951	0.1872	0.4729
785B14A:0X TRQL/LIFETIME	V5136	0.4487	0.5449	0.4848	0.3798	0.4903	0.5119	0.4858	0.5382	0.4402	0.2905	0.6252
785B14B:0X TRQL/LAST12MO	V5137	0.3550	0.4480	0.4697	0.3883	0.4861	0.4614	0.3963	0.4669	0.4771	0.3378	0.6256
785B14C:0X TRQL/LAST30DA	V5138	0.2240	0.2972	0.3240	0.3301	0.3624	0.3327	0.2746	0.3831	0.3613	0.3671	0.4729
HEROIN COMPOSITE 1-11	R6139	0.1457	0.1987	0.1997	0.1932	0.2868	0.2637	0.2238	0.2750	0.2758	0.2287	0.2603
HEROIN COMPOSITE 1-18	R96	0.1799	0.2370	0.2243	0.2043	0.2990	0.2926	0.2600	0.3070	0.2829	0.2296	0.2887
HEROIN DICHOTOMY	R52	0.1901	0.2445	0.2211	0.1914	0.2818	0.2855	0.2630	0.3011	0.2577	0.2047	0.2815
785B15A:0X HR*/LIFETIME	V5139	0.1440	0.1992	0.1952	0.1881	0.2834	0.2656	0.2247	0.2881	0.2796	0.2324	0.2638

791120 C04245 NDC

NOV 28, 1979 BY78 NDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SKND:NDC.APPX1

CORRELATIONS

		R41 AMPH DIC HOTOMY	V5127 785B11A: 0X AMPH/ LIFETIME	V5128 785B11B: 0X AMPH/ LAST12MO	V5129 785B11C: 0X AMPH/ LAST30DA	R6130 QUAD COM POSITE 1 -11	R69 QUAD COM POSITE 1 -14	R42 QUAD DIC HOTOMY	V5130 785B12A: 0X QUAD/ LIFETIME	V5131 785B12B: 0X QUAD/ LAST12MO	V5132 785B12C: 0X QUAD/ LAST30DA	R6133 BRBT COM POSITE 1 -11
785B15B:0X "B"/LAST 12MO	V5140	0.1084	0.1558	0.1724	0.1819	0.2546	0.2248	0.1766	0.2338	0.2652	0.2218	0.2300
785B15C:0X "B"/LAST 30DA	V5141	0.0549	0.0835	0.0892	0.1048	0.1882	0.1353	0.1108	0.1326	0.1488	0.1716	0.1089
NABC COMPOSITE 1-11	R6142	0.3782	0.4710	0.4618	0.3703	0.4186	0.4190	0.3936	0.4109	0.3827	0.2735	0.4874
NABC COMPOSITE 1-14	R106	0.4283	0.5098	0.4698	0.3686	0.4079	0.4321	0.4158	0.4158	0.3588	0.2439	0.4872
NABC DICHOTOMY	R53	0.4350	0.4987	0.4346	0.3268	0.3650	0.4058	0.4074	0.3827	0.3040	0.1951	0.4833
785B16A:0X NABC/LIFETIME	V5142	0.3834	0.4921	0.4867	0.3535	0.4215	0.4351	0.4085	0.4531	0.3796	0.2653	0.4908
785B16B:0X NABC/LAST12MO	V5143	0.3061	0.4023	0.4219	0.3483	0.3908	0.3751	0.3268	0.3777	0.3786	0.2773	0.4567
785B16C:0X NABC/LAST30DA	V5144	0.1811	0.2479	0.2671	0.2798	0.2529	0.2385	0.2037	0.2376	0.2472	0.2621	0.2964
INRL COMPOSITE 1-11	R6145	0.2719	0.2973	0.2919	0.2550	0.2218	0.2330	0.2219	0.2186	0.2005	0.1264	0.2794
INRL COMPOSITE 1-14	R116	0.3251	0.3837	0.3141	0.2557	0.2389	0.2632	0.2655	0.2422	0.1971	0.1178	0.2932
INRL DICHOTOMY	R61	0.3301	0.3818	0.2969	0.2287	0.2191	0.2573	0.2698	0.2366	0.1728	0.0985	0.2715
785B17A:0X INRL/LIFETIME	V5145	0.3020	0.3514	0.3135	0.2584	0.2574	0.2809	0.2771	0.2755	0.2231	0.1309	0.3099
785B17B:0X INRL/LAST12MO	V5146	0.1837	0.2070	0.2255	0.2084	0.1753	0.1701	0.1895	0.1530	0.1739	0.1107	0.2276
785B17C:0X INRL/LAST30DA	V5147	0.1032	0.1224	0.1387	0.1560	0.1066	0.0977	0.0803	0.0946	0.1096	0.0924	0.1888

CORRELATIONS

		R76 BRBT COMPOSITE 1-14	R43 BRBT DICHOTOMY	V5133 785B13A: %BRBT/LIFETIME	V5134 785B13B: %BRBT/LAST12MO	V5135 785B13C: %BRBT/LAST30DA	R6136 TRQL COMPOSITE 1-11	R86 TRQL COMPOSITE 1-14	R51 TRQL DICHOTOMY	V5136 785B14A: %TRQL/LIFETIME	V5137 785B14B: %TRQL/LAST12MO	V5138 785B14C: %TRQL/LAST30DA
BRBT DICHOTOMY	R43	0.9511										
785B13A:%BRBT/LIFETIME	V5133	0.9087	0.8190									
785B13B:%BRBT/LAST12MO	V5134	0.8288	0.6183	0.8409								
785B13C:%BRBT/LAST30DA	V5135	0.5810	0.3866	0.5988	0.7608							
TRQL COMPOSITE 1-11	R6136	0.6005	0.5078	0.6028	0.6099	0.4694						
TRQL COMPOSITE 1-14	R86	0.5885	0.5394	0.5788	0.5236	0.3778	0.9440					
TRQL DICHOTOMY	R51	0.5220	0.5166	0.5029	0.3970	0.2604	0.8043	0.9554				
785B14A:%TRQL/LIFETIME	V5136	0.6172	0.5476	0.6757	0.5824	0.4239	0.9062	0.8961	0.8021			
785B14B:%TRQL/LAST12MO	V5137	0.5565	0.4349	0.5683	0.6313	0.5000	0.9547	0.8068	0.5980	0.8345		
785B14C:%TRQL/LAST30DA	V5138	0.4001	0.2906	0.4112	0.4861	0.5582	0.6803	0.5358	0.3548	0.5732	0.7276	
NEROIN COMPOSITE 1-11	R6139	0.2290	0.1762	0.2361	0.2517	0.2302	0.2038	0.1761	0.1351	0.2081	0.2095	0.1988
NEROIN COMPOSITE 1-14	R96	0.2689	0.2230	0.2806	0.2718	0.2405	0.2277	0.2061	0.1673	0.2414	0.2269	0.2015
NEROIN DICHOTOMY	R52	0.2739	0.2392	0.2890	0.2591	0.2227	0.2242	0.2101	0.1777	0.2444	0.2174	0.1917
785B15A:%"N"/LIFETIME	V5139	0.2347	0.1833	0.2515	0.2528	0.2313	0.2035	0.1779	0.1562	0.2222	0.2077	0.1883
785B15B:%"N"/LAST 12MO	V5140	0.1870	0.1271	0.1889	0.2340	0.2196	0.1795	0.1872	0.1044	0.1746	0.1981	0.1929
785B15C:%"N"/LAST 30DA	V5141	0.0910	0.0649	0.0997	0.1120	0.1139	0.0948	0.0757	0.0514	0.0843	0.1035	0.1568
NARC COMPOSITE 1-11	R6142	0.4737	0.4130	0.4762	0.4578	0.3475	0.4510	0.4236	0.3588	0.4489	0.4352	0.3138
NARC COMPOSITE 1-14	R106	0.4991	0.4604	0.4964	0.4380	0.3177	0.4515	0.4455	0.3978	0.4664	0.4168	0.2889
NARC DICHOTOMY	R53	0.4773	0.4619	0.4700	0.3812	0.2628	0.4113	0.4252	0.3972	0.4402	0.3626	0.2403
785B16A:%NARC/LIFETIME	V5142	0.4791	0.4293	0.5127	0.4812	0.3318	0.4504	0.4307	0.3722	0.4876	0.4264	0.3009
785B16B:%NARC/LAST12MO	V5143	0.4184	0.3417	0.4257	0.4460	0.3506	0.4178	0.3730	0.2974	0.4004	0.4232	0.3119
785B16C:%NARC/LAST30DA	V5144	0.2547	0.1989	0.2642	0.2880	0.3008	0.2794	0.2397	0.1815	0.2525	0.2897	0.2996
INHL COMPOSITE 1-11	R6145	0.2807	0.2534	0.2705	0.2581	0.1898	0.2889	0.2397	0.2126	0.2889	0.2266	0.1631
INHL COMPOSITE 1-14	R116	0.3114	0.2971	0.3007	0.2528	0.1809	0.2651	0.2746	0.2573	0.2799	0.2319	0.1639
INHL DICHOTOMY	R61	0.3006	0.2977	0.2907	0.2241	0.1546	0.2518	0.2710	0.2630	0.2758	0.2105	0.1466

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NOV 29, 1979 BY78 BDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SN40:BDC.APP1

CORRELATIONS

		B76 PRBT COM POSITE 1 -10	B43 BRBT DIC HOTOMY	V5133 785B13A: 0X PRBT/ LIFETIME	V5134 785B13B: 0X BRBT/ LAST12MO	V5135 785B13C: 0X BRBT/ LAST30DA	R6116 TRQL COM POSITE 1 -11	R86 TRQL COM POSITE 1 -10	R51 TRQL DIC HOTOMY	V5136 785B14A: 0X TRQL/ LIFETIME	V5137 785B14B: 0X TRQL/ LAST12MO	V5138 785B14C: 0X TRQL/ LAST30DA
785B17A:0X IRBL/LIFETIME	V5145	0.3191	0.2955	0.3312	0.2751	0.2099	0.2697	0.2731	0.2506	0.2975	0.2422	0.1602
785B17B:0X IRBL/LAST12MO	V5146	0.2134	0.1782	0.2023	0.2233	0.1761	0.1962	0.1768	0.1629	0.1809	0.1999	0.1833
785B17C:0X IRBL/LAST30DA	V5147	0.1324	0.1075	0.1338	0.1440	0.1277	0.1066	0.0932	0.0726	0.0972	0.1080	0.1206

CORRELATIONS

		B6139 HEROIN C OMPOSITE 1-11	B96 HEROIN C OMPOSITE 1-10	B52 HEROIN D ICHOTOMY	V5139 785B15A: 0X "H"/L IFETIME	V5140 785B15B: 0X "H"/L AST 12MO	V5141 785B15C: 0X "H"/L AST 30DA	R6102 BARC COM POSITE 1 -11	R106 BARC COM POSITE 1 -10	R53 BARC DIC HOTOMY	V5142 785B16A: 0X BARC/ LIFETIME	V5143 785B16B: 0X BARC/ LAST12MO
HEROIN COMPOSITE 1-10	B96	0.9338										
HEROIN DICHOTOMY	B52	0.7720	0.9083									
785B15A:0X "H"/LIFETIME	V5139	0.9124	0.8984	0.7867								
785B15B:0X "H"/LAST 12MO	V5140	0.9504	0.7942	0.5679	0.8486							
785B15C:0X "H"/LAST 30DA	V5141	0.7835	0.5979	0.3669	0.6759	0.8178						
BARC COMPOSITE 1-11	B6102	0.2956	0.3008	0.2751	0.2737	0.2655	0.1919					
BARC COMPOSITE 1-10	B106	0.2663	0.2901	0.2818	0.2546	0.2216	0.1493	0.9876				
BARC DICHOTOMY	B53	0.2157	0.2545	0.2622	0.2181	0.1616	0.0971	0.8185	0.9571			
785B16A:0X BARC/LIFETIME	V5142	0.2844	0.3091	0.2987	0.2922	0.2374	0.1782	0.9207	0.9038	0.8068		
785B16B:0X BARC/LAST12MO	V5143	0.2981	0.2879	0.2696	0.2718	0.2906	0.2139	0.9580	0.8223	0.5250	0.8639	
785B16C:0X BARC/LAST30DA	V5144	0.2601	0.2300	0.1823	0.2278	0.2628	0.2644	0.7001	0.5555	0.3740	0.6043	0.7815
IRBL COMPOSITE 1-11	B6145	0.1586	0.1687	0.1608	0.1478	0.1416	0.0832	0.2817	0.2533	0.2404	0.2398	0.2130
IRBL COMPOSITE 1-10	B116	0.1600	0.1829	0.1845	0.1524	0.1291	0.0462	0.2533	0.2785	0.2684	0.2588	0.2159
IRBL DICHOTOMY	B61	0.1435	0.1737	0.1823	0.1395	0.1055	0.0833	0.2353	0.2618	0.2611	0.2491	0.1953
785B17A:0X IRBL/LIFETIME	V5145	0.1896	0.2049	0.1980	0.1820	0.1620	0.0668	0.2666	0.2869	0.2789	0.2858	0.2307
785B17B:0X IRBL/LAST12MO	V5146	0.1373	0.1327	0.1160	0.1249	0.1503	0.0355	0.1976	0.1982	0.1801	0.1781	0.1875
785B17C:0X IRBL/LAST30DA	V5147	0.0720	0.0674	0.0570	0.0599	0.0741	0.0319	0.1111	0.1105	0.0997	0.1014	0.1022

791120 004245 BDC

NOV 28, 1979 BY78 BDC CORRELATIONS OF DRUG USE AND BACKGROUND/EXPERIENCE VARIABLES TOTAL SETUP SK4U:BDC.APPI3

CORRELATIONS

		V5144 785B16C: 0I HARC/ LAST30DA	R6145 IHHL COM POSITE 1 -11	B116 IHHL COM POSITE 1 -14	R61 IHHL DIC HOTOMY	V5145 785B17A: 0I IHHL/ LIFETIME	V5146 785B17B: 0I IHHL/ LAST12MO
IHHL COMPOSITE 1-11	R6145	0.1312					
IHHL COMPOSITE 1-14	B116	0.1283	0.9177				
IHHL DICHOTOMY	R61	0.1126	0.7547	0.9533			
785B17A:0I IHHL/LIFETIME	V5145	0.1305	0.8516	0.8685	0.7864		
785B17B:0I IHHL/LAST12MO	V5146	0.1123	0.9198	0.7003	0.4568	0.7129	
785B17C:0I IHHL/LAST30DA	V5147	0.0973	0.6947	0.4830	0.2690	0.4968	0.7369

*****NORMAL TERMINATION OF BDC $133.69 825.14 SECS

REFERENCES

Bachman, J.G. and Johnston, L.D. The Monitoring the Future project: Design and procedures (Monitoring the Future Occasional Paper 1). Ann Arbor: Institute for Social Research, 1978.

Bachman, J.G., Johnston, L.D., and O'Malley, P.M. Monitoring the Future: Questionnaire responses from the nation's high school seniors, 1976. Ann Arbor: Institute for Social Research, 1980(a).

Bachman, J.G., Johnston, L.D., and O'Malley, P.M. Monitoring the Future: Questionnaire responses from the nation's high school seniors, 1978. Ann Arbor: Institute for Social Research, 1980(b).

Bachman, J.G., O'Malley, P.M., and Johnston, J. Youth in Transition, Volume VI: Adolescence to adulthood--a study of change and stability in the lives of young men. Ann Arbor: Institute for Social Research, 1978.

Bachman, J.G., O'Malley, P.M. and Johnston, L.D. Correlates of drug use, part I: Selected measures of background, recent experiences, and lifestyle orientations (Monitoring the Future Occasional Paper 8). Ann Arbor: Institute for Social Research, 1980.

Cannell, C., Fisher, G., and Bakker, T. Reporting of hospitalization in the health interview survey. Vital and Health Statistics, U.S. Public Health Service, Series 2, No. 6, 1965.

Cannell, C., Fowler, F. A study of the reporting of visits to doctors in the national health survey. Survey Research Center, The University of Michigan, (mimeo), 1963.

Golladay, M. The condition of education. National Center for Educational Statistics. Washington, D.C.: U.S. Government Printing Office, 1976.

Golladay, M. The condition of education. National Center for Educational Statistics, Volume 3, Part 1. Washington, D.C.: U.S. Government Printing Office, 1977.

Johnston, L.D. Drugs and American youth. Ann Arbor: Institute for Social Research, 1973.

Johnston, L.D. and Bachman, J.G. Monitoring the Future: Questionnaire responses from the nation's high school seniors, 1975. Ann Arbor: Institute for Social Research, 1980.

Johnston, L.D., Bachman, J.G., and O'Malley, P.M. Drug use among American high school students, 1975-1977 (National Institute on Drug Abuse, DHEW Publication No. [ADM] 78-619). Washington, D.C.: U.S. Government Printing Office, 1977.

REFERENCES (Continued)

Johnston, L.D., Bachman, J.G., and O'Malley, P.M. Drugs and the class of 1978: Behaviors, attitudes and recent national trends (National Institute on Drug Abuse, DHEW Publication No. [ADM] 79-877). Washington, D.C.: U.S. Government Printing Office, 1979.

Johnston, L.D., Bachman, J.G. and O'Malley, P.M. Monitoring the Future: Questionnaire responses from the nation's high school seniors, 1977. Ann Arbor: Institute for Social Research, 1980.

Lansing, J.B. and Morgan, J.N. Economic survey methods. Ann Arbor: Institute for Social Research, 1971.

Oksenberg, L. and Cannell, C. Some factors underlying the validity of response in self report. Survey Research Center, The University of Michigan, (mimeo), 1977.

Sudman, S., and Bradburn, N.M. Response effects in surveys. Chicago: Aldine Publishing Company, 1974.